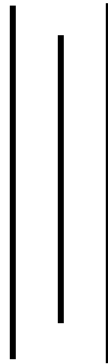


**A STUDY ON PREMIUM COLLECTION AND INVESTMENT
PATTERN OF LIFE INSURANCE COMPANIES IN THE
CONTEXT OF NEPALESE FINANCIAL MARKET**

By
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A Thesis Submitted to:
Office of the Dean
Faculty of Management
Tribhuvan University



*In partial fulfillment of the requirement for the Degree of
Master of Business Studies (M.B.S)*

Kathmandu, Nepal
June, 2009

RECOMMENDATION

This is to certify that the Thesis

Submitted by:

NISCHAL RISAL

Entitled:

**A STUDY ON PREMIUM COLLECTION AND INVESTMENT
PATTERN OF LIFE INSURANCE COMPANIES IN THE
CONTEXT OF NEPALESE FINANCIAL MARKET**

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VIVA-VOCE SHEET

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by

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**A STUDY ON PREMIUM COLLECTION AND INVESTMENT
PATTERN OF LIFE INSURANCE COMPANIES IN THE
CONTEXT OF NEPALESE FINANCIAL MARKET**

*And found the thesis to be the original work of the student and written
according to the prescribed format. We recommend the thesis to
be accepted as partial fulfillment of the requirement for*

Master Degree of Business Studies (M.B.S.)

Viva-Voce Committee

Head, Research Department

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DECLARATION

I hereby declare that the work reported in this thesis entitled “**A STUDY ON PREMIUM COLLECTION AND INVESTMENT PATTERN OF LIFE INSURANCE COMPANIES IN THE CONTEXT OF NEPALESE FINANCIAL MARKET**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master’s Degree in Business Study (M.B.S.) under the supervision of Dr. Kamal Das Manandhar and Dhurba Subedi of Shanker Dev Campus.

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ABBREVIATIONS

ALICO	American Life Insurance Company Limited.
Avg.	Average
B.F.D.	Bank Fixed Deposits
B.S.	Bikram Shambat
C.F.	Correction Factor
Chg.	Change
C.V.	Coefficient of Variation
D.F.	Degree of Freedom
F.F.D	Finance Fixed Deposits
F.Y.	Fiscal Year
G.S.B	Government Saving Bonds
Govt.	Government
i.e.	That is
Insig	Insignificance
LIC	Life Insurance Corporation Nepal.
MBS	Master of Business Studies
Misc.	Miscellaneous
N.G.	Nepal Government
NEPSE	Nepal Stock Exchange
NLGI	National Life and General Insurance Company Limited
NLIC	Nepal Life Insurance Company Limited
No.	Number
P.E.	Probable Error
r.	Correlation
R.B.S.	Rastriya Beema Sansthan
R ²	Coefficient of Determination
Rs.	Rupees
S.D.	Standard Deviation

Sig.	Significance
SPSS	Statistical Program for Social Science
T.U.	Tribhuvan University
∞	Infinity

CHAPTER - I

INTRODUCTION

This introductory chapter is concentrated on forming a background and a framework for the research paper. It includes the focus and background of the study, statement of the problem, objective of the study as well as various limitations that occurred within the entire study period.

This chapter also includes the methodology used through out the study including the type of research design followed, sampling technique, types of data, as well as description of the tools that are used to analyze the data.

1.1 Background of the Study

Nepal is a small country in between two big and upcoming powerful countries India and China occupying only 0.1% of the whole world. The annual per capita GDP estimated to be US\$250 only. The economical growth highly depends in agricultural growth. Development of country depends upon the economic position and industrialization. The current economic condition is degrading day by day by instability in political affairs and unfair industrial environment. The economic development demands the regular flow of funds which is possible through proper financial system only. A sound financial system consists of different financial intermediaries as well as markets. They help in transformation of funds required for the economic development through sound financial system. Therefore the role of these intermediaries is very crucial to the economic development.

Development of any country is directly related with its economic condition. If the economic conditions of any country rise development will also arise. These days the existence of organized financial market and capital market within the boundary of a nation are regarded as an essence for the development of a country. The

financial market and the capital markets of a country are the composite of varied financial institution and intermediaries through which short term and long term funds are pooled and made available to the business, government and individuals as in the form of the investment. So to feel the investors risk free and for a long lasting of the industry there exists the need of the insurance. Different people have different opinion about the origin of the insurance. But everyone is agreed that the marine insurance is the first insurance in the world. The principle of insurance is against risk," Insurance is contract made by a company or society or the state to provide a guarantee for compensation for loss, damage, sickness, death etc. in return for regular payment."

Insurance works as a double edged weapon. On one side, it provides financial security against risk and on the other side; it provides capital to the business houses. In the 21st century, the world suffers from competition, so the existence of organized financial market and capital market within the boundary of the nation is regarded as an essence for the development of a country. The government firms and individuals agencies are playing vital role in the financial and capital market through investing the collected resources within the recognized and national sector like productive industry, financial area yet expecting reasonable benefit themselves. Among such financial institutions and intermediaries insurance companies are also the major ones. Integrated and speedy development of the country is possible only when competitive insurance react nooks and corners of the country. Insurance can occupies quite an important place in the frame work of every economy because it provides certainty to the industry, business and capital for the development of industry, trade and business, investing the fund collected as premium. No human activity is free from the risk. Moreover, sophisticated scientific innovation escalating violence and terrorism have made the risk and growing critical issue. In this context the idea of the risk management and idea of insurance is emerged. Insurance is devised as a financial security against risk.

Insurance offers a high economic relief to different types of industrialists, businessmen and individuals.

Insurance has been the pillar of alertness, courage and eagerness to develop the life of living standard of common people, industrialists and traders of today's world. Insurance is a kind of financial mechanism which provides financial security against risk. In advanced countries insurance companies have played a very significant intermediaries role in mobilizing funds through the prudential combination of investment portfolios. However in developing countries like Nepal the role of insurance companies is still to be realized as an important vehicle of mobilizing the internal saving through various insurance schemes in the economy. Insurance is a social device, which combines the risks of individuals into a group using funds contributed by members of the group to pay for losses. Thus main function of insurance company is to collect premium and mobilize such collected funds into various sectors of economy with an organized and institutional manner. In the context of Nepalese insurance companies, they provide various insurance policies and charge premium under insured risk and nature. Insurance companies collect fund through various clients (people and organization) as premium. So all of the insurance companies are responsible for their client's interest. Insurance companies collect funds as premium and make investment. Premium means a certain charged amount which is paid by the insured to the insurer for bearing a risk and uncertainty. Insurance industry a composite structure of insurance companies is also regarded as financial institutions bearing very distinct characters among various financial institutions and intermediaries. They are capable of providing industrial finance, government finance or even personal finances through their investment policy and strategy, based upon their own corporate objective and nature of the line of insurance business. Insurance is one of the major risks handlings methods. It is a mechanism of spreading of risks among the various concerned people. Insurance is an instrument to spread the loss caused by

a particular risk over a number of persons or distribution of risk among various people who are interested to accept risk for certain return. Integrated and speedy development place in the framework of every economy because insurance provides certainty to the industry, business and capital for the development of the industry, trade of business investing the fund collected as premium under insured risk and nature. They collect fund through various clients as premium and invest in different sectors for more return for their shareholders. This study looks and analysis different life insurance company's premium collection and investment situation and sector. This study is concentrate on the premium collection and investment pattern of the insurance industry and aimed at evaluating and analyzing the premium collection trend and investment sector and ratio too.

1.2 Focus of the Study

The major function of financial institutions is the collection of fund. Insurance companies are one of such financial institutions, which collect their fund from the premium. Premium means a certain charged amount which is paid by the insured to the insurer for bearing risk and uncertainty. As significant difference in the nature of the insurance companies mainly there are two types of insurance i.e. life and non life insurance companies. Life and non life premium is also vast difference because life premium is refundable and non life premium is non refundable.

Investment is one of the major parts of all financial institutions. All financial companies invest their fund to the desirable sector with profit motive. "Investment may be defined broadly as the employment of capital into the aim of producing gain in the shape of income or appreciation in value or both." Investment for business firm will be the use of resources, particularly the financial resource, with the aim of producing a gain whether, in the form of future income or appreciation in the value of the resources or some times both of them, too. In a firm, investment

might evolve in the form of real investment, which involve some kind of tangible assets, i.e. land, machinery, building, etc and financial investment, which involves contracts written on piece of paper, such as common stocks or bonds.

However, investment for a financial institution and intermediaries will be the sacrifice of current income for future income by letting other utilizes its surplus resource. In other words investment for an intermediaries will be the management of the surplus resource in such a way as to make it work for providing benefits to it's owner as well as own self by letting third parties to use the surplus resource. For an institution it will be decision problem of making the financial resource work in own behalf to provide a return as large as possible as well as constant and safe. So they invest in external asset.

Investment fund for the insurance companies are the excess amount after claims paid and managerial expenses.

Premium Collection:

- (-) Claim paid
- (-) Managerial Expenses

Investible Fund

The investment fund should be used in such sector that they could get maximum return. But insurance companies' investment portfolios are regulating by the insurance board of Nepal. Under the rules and regulation, every insurance company must invest their 75% investible fund declared as compulsory sectors and rest 25% in other sectors.

Similarly investment policy is the formulation of the investment strategy based upon the organizational and financial character of the particular firm itself. Being more specific investment policy is the decision of choosing the fixed income or variable income investment keeping various other considerations. It will be preliminary decision of selecting the proper investment sector based upon single or joint consideration of safety, liquidity, marketability, profitability, stability or else. Usually such investment policy aims at arriving to the optimized or agreed mix of risk-return from the investment.

Premium collection and investment are the major tasks for every insurance company so, success and failure of insurance companies depends upon these task. More premium collection mans more income and more investment means more return. So this study is concentrate on the premium collection and investment position of the Nepalese life insurance companies and aimed at evaluating and analyzing the premium collection trend and investment sector and ration too.

1.3 Company's Profile

Insurance board (Beema Samiti) is a regulatory authority of insurance sector as per insurance act 2049. Any company to operate insurance business must register to the Samiti. If any company is operating insurance business without registering to Beema Samiti, that business is illegal. Companies registered in insurance board are only authorized to operate this business. Beema Samiti, (Insurance Board) is doing homework to make insurance companies more transparent. "We are working to make them publish their quarterly reports to maintain transparency and inform small investors about the companies' financial health," said Devendra Pratap Shah, chairman of the regulatory authority that has the primary duty to protect policy holders, adding that "protecting the interest of small investors is also our duty."

At present, the insurance companies submit their reports yearly to the board but do not need to publish that in the newspapers. "We have just started a new regulation

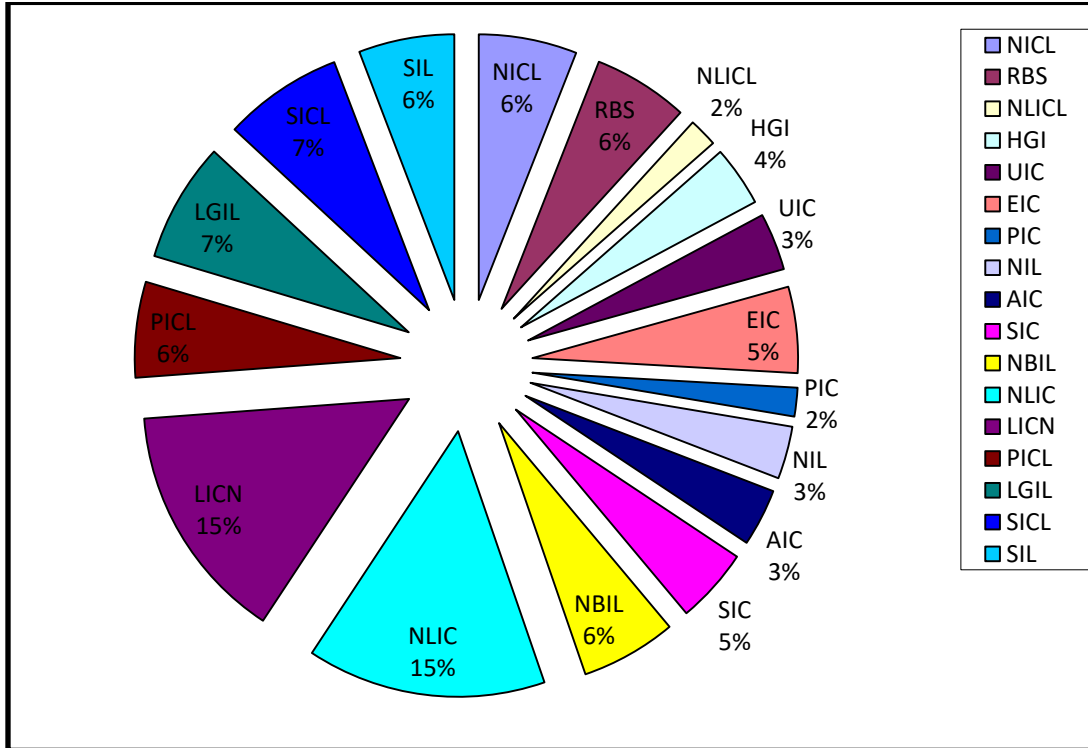
of submitting detailed reports," Shah said adding that earlier disclosure system was not very good. The capital market is financial institutions-dominated because they are transparent due to the Nepal Rastra Bank (NRB) rule. According to the central bank rule, financial institutions must publish their quarterly accounts regularly. Failure to do so will invite penalty. The insurance company group comes third in terms of trading of their shares at the Nepal Stock Exchange (NEPSE) after financial institutions - Commercial banks, development banks and finance companies - and hydropower groups. Currently, 17 insurance companies are listed under the insurance group that has a total of 17,187,384-unit shares worth Rs 1,718,738,400, according to NEPSE. They have earned Rs 3.23 billion premium collectively in the fiscal year 2005-06 and the total collection of premium might be above Rs 4.5 billion at the end of 2007-08, but that has yet to be finalized. Apart from these listed insurance companies, new companies like Prime Life Insurance (PLI), Gurans Life Insurance (GLI), Surya Life Insurance (SLI) and Asian Life Insurance (ALI) are floating 1.1 million-unit shares worth Rs 110 million each as life insurance companies need to have Rs 360 million for life insurance while non-life insurance companies need to have Rs 100 million, according to the new regulation. The paid up and issue capital of all these insurance companies is equal to Rs 360 million, of which Rs 250 million belongs to promoters. "Within a year of its operation, Prime Life Insurance will issue 1.1 million-unit shares worth Rs 110 million," said Laxman Rizal, chief executive officer (CEO) of Prime Life Insurance. New players' entry in the insurance group ensures market expansion and more supply of shares that will help stabilize the capital market. Buying shares of insurance companies is a more secure venture than any other companies as the insurance business itself is a secure one. Insurance is a tool of the financial sector that guarantees an insurer of their future. At present, less than five per cent of the total Nepali populace is reaping the benefits of insurance. Even property holdings of national importance are not insured. The life insurance sector's contribution to the GDP is only two per cent

(2%) and it has generated around 20,000 direct and indirect jobs. In Nepal, most people do not know insurance is a necessity and it is not at the top of their priority list. However, the fact remains that insurance is a valuable tool to protect a person's family from unforeseen events that can severely damage their financial futures. Sadly, not many people pay enough attention to this fact.

Listed Insurance Companies at NEPSE

1	Nepal Insurance Co Ltd (NICL)	1,026,984-unit	Rs102,698,400
2	Rastriya Beema Sansthan (RBS)	995,138-unit	Rs 99,513,800
3	National Life Insurance Co Ltd (NLICL)	300,000-unit	Rs 30,000,000
4	Himalayan General Insurance Ltd (HGI)	630,000-unit	Rs 63,000,000
5	United Insurance Co Ltd (Nepal) Ltd (UIC)	600,000-unit	Rs 60,000,000
6	Everest Insurance Co Ltd (EIC)	900,000-unit	Rs 90,000,000
7	Premier Insurance Co Ltd (PIC)	300,000-unit	Rs 30,000,000
8	Neco Insurance Co Ltd (NIL)	550,000-unit	Rs 55,000,000
9	Alliance Insurance Co (AIC)	599,862-unit	Rs 59,986,200
10	Sagarmatha Insurance Co (SIC)	785,400-unit	Rs 78,540,000
11	NB Insurance Co Ltd (NBIL)	1,000,000-unit	Rs 100,000,000
12	Nepal Life Insurance Co Ltd (NLIC)	2,500,000-unit	Rs 250,000,000
13	Life Insurance Co Nepal (LICN)	2,500,000-unit	Rs 250,000,000
14	Prudential Insurance Co (PICL)	1,000,000-unit	Rs 100,000,000
15	Lumbini General Insurance (LGIL)	1,250,000-unit	Rs 125,000,000
16	Shikhar Insurance Co Ltd (SICL)	1,250,000-unit	Rs 125,000,000
17	Siddhartha Insurance Ltd (SIL)	1,000,000-unit	Rs 100,000,000
	Total	17,187,384-unit	Rs 1,718,738,400

Chart 1.1
Number of Unit Share and Total Amount from
Share of Listed Insurance Companies



The Insurance Companies Operating in Nepal are as follows:

- a. Companies operating both life and non life business.
 - Rastriya Beema Sansthan
- b. Companies operating life business
 - National life insurance company limited.
 - Nepal life insurance company limited.
 - Life insurance corporation (Nepal) limited.
 - American Life Insurance company limited.
 - Asian life insurance company limited.
 - Surya life insurance company limited.
 - Gurans life insurance company limited.
 - Prime life insurance company limited.

- c. Companies operating non life business
 - Nepal insurance company limited.
 - The oriental insurance company limited.
 - National insurance company limited.
 - Himalayan general insurance company limited.
 - United insurance company (Nepal) limited.
 - Premier insurance company (Nepal) limited.
 - Everest insurance company limited.
 - Neco insurance company limited.
 - Sagarmatha insurance company limited.
 - Alliance insurance company limited.
 - NB insurance company limited.
 - Prudential insurance company limited.
 - Sikhhar insurance company limited.
 - Lumbini insurance company limited.
 - NLG insurance company limited.
 - Siddhartha insurance company limited.

As per Beema Samiti, among nine life insurance companies including Rastriya Beema Sansthan, the newly established life insurance companies are Asian, Surya, Gurans and Prime Life Insurance Companies which are presently operating in the context of Nepalese financial market.

1.3.1 Rastriya Beema Sansthan

Introduction

Government of Nepal established Rastriya Beema Sansthan, 37 years ago as a pioneer professional Insurance Company to contribute toward economic development of the nation by doing non-life and life insurance business. Mobilization of internal resources and capital, production of professional, efficient

insurance personnel, curbing outflow of foreign currency were the main objectives of GON at that time. This organization has never looked back since then. It has been fulfilling the afore-said objectives since its inception. RBS holds major share in the national insurance market, it holds 65% of the total life insurance market and 35% of the total non-life insurance market.

Establishment

RBS was established as a private company on 16th December, 1967 and later on converted to corporation under the Rastriya Beema Sansthan Act 2025 on 15th December, 1968.

General/non-life business started functioning on 23rd February, 1968 whereas Life business started functioning on 18th February, 1973.

Board of Directors

Seven members executive directors' board with government Nepal's majority vote including the chairman is as follows:

Chairman, nominated by GON

Member, nominated by GON

Member, nominated by GON

Member, nominated by Nepal Rastra Bank

Member, nominated by Nepal Bank Limited

Member, elected by public shareholders

Administrator nominated by GON

The Administrator acts as a member of Board of Directors as well as chief executive officer of the organization. The Administrator is responsible for the daily functioning of the organization as per Rastriya Beema Sansthan Act and Regulations.

Capital Structure

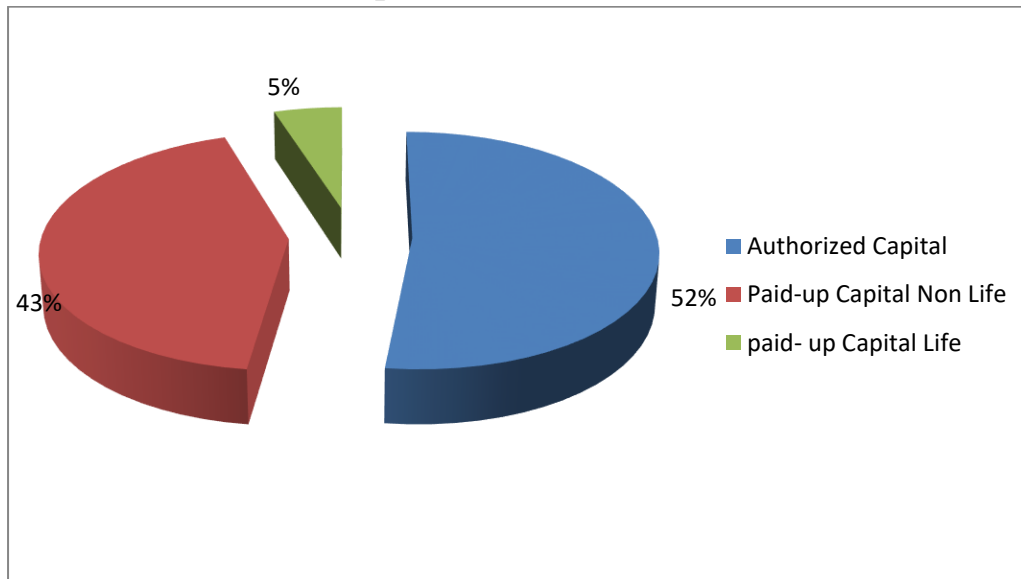
Authorized Capital Rs. 10,00,00,000

Paid-up Capital

Non-Life Rs. 8,28,99,900

Life Rs. 93,00,000

Chart 1.2
Capital Structure of RBS



Facilities (Insurance Plans) Provided by RBS

General (Non Life) Insurance Business

1. Fire Insurance
2. Motor Insurance
3. Aviation Insurance
4. Marine Insurance
5. Engineering Insurance
6. Medical Aid Scheme Insurance
7. Personal Accident Insurance
8. Cash in Transit Insurance
9. Burglary and Housebreaking Insurance

10. Workmen's Compensation Insurance
11. Fidelity Guarantee Insurance
12. Banker's Blanket Insurance
13. Flight Insurance
14. Public Liability Insurance
15. House Hold Policy
16. Cattle Insurance
17. Miscellaneous Insurance

Life insurance business

1. Endowment Life Assurance
2. Endowment Assurance with Double Accident Death Benefit
3. Whole Life Assurance
4. Anticipated Endowment Life Assurance
5. Children's Marriage and Education Endowment Life Assurance
6. Term Life Assurance
7. Debt Insurance
8. Group Endowment Life Assurance

1.3.2 American Life Insurance Company (ALICO)

COMPANY NEWS		http://query.nytimes.com	default	August 4, 2001	The New York Times
nytimes.com	101	The American Life Insurance Company has received a			

The American Life Insurance Company has received a license in Nepal, making it the first global life insurer allowed into the nation, the country's insurance board said. American Life, which is a unit of the American International Group, was granted the license after it deposited 50 million Nepali rupees (\$666,500) in a bank in Nepal as its working capital, authorities said. American Life had first sought a license in 1977 to run a branch in Nepal, an impoverished kingdom in Nepal (Newyork Times, 2001:4).

American life insurance company (ALICO), originally named Asia Life Insurance Company, was formed 85 years ago in Shanghai, China by Mr. C.V. Starr, the founder of what would later become ALICO's parent company, American International Group, Inc. (AIG). Within ten years, C.V. Starr had opened offices across China, Hong Kong and elsewhere throughout Southeast Asia. After World War II the Company turned its sights towards the Caribbean, and subsequently towards the Middle East, Africa, Europe, the Far East and the Americas: In 1951, Asia Life Insurance Company changed its name to American Life Insurance Company (ALICO). Today, ALICO, with its Home Office in Wilmington, Delaware USA, operates in approximately 50 countries and territories around the world and continues to expand its global network.

ALICO's branches and subsidiaries market a wide range of life and health insurance products. These products include traditional life insurance, variable universal life insurance, supplemental medical and personal accidents products, health and hospitalization insurance, group life, pensions and annuities, through a network of some 33,000 agents. ALICO does business globally in Japan, Europe, the Middle East, South Asia, Latin America, and the Caribbean in more than 50 countries.

In 2006, ALICO celebrates its 85th anniversary serving and providing financial security to policy owners globally. Experience gained through international diversification sets ALICO apart. Based upon this experience, ALICO has cultivated the ability to respond quickly to changing customer needs and marketplace conditions. It remains committed to pursuing a strategy of customized products and distribution channels to meet the particular and changing needs of consumers in each country where ALICO operates. Local knowledge and awareness has typified ALICO's 85 year history and continues to this day.

ALICO's global reach, its strategic focus on emerging markets and its financial strength continue today as the Company serves its costumers in the 21st century.

Facilities (Insurance plan) provided by ALICO

Three Payment Plan

1. Education Protection Plan
2. Endowments

1.3.3 Nepal Life Insurance Company Limited

NLIC is established under the company act 2053 and insurance act 2049 as the public limited company on 2058/1/21 (04/05/2001). It is the first company that only deals with life insurance in Nepal and is solely invested by Nepalese citizens. The founders of the company are the well known businessman of Nepal, so the financial situation of the company is always stable. The main share holders of the company are related with the well known Triveni Group of Nepal. The company has an authorized and issued capital base of Rs. 30 crore. 80% of the issued capital i.e. Rs. 24 crore has been fully paid up by promoters. The remaining 20% shares for Rs. 6 crore have been paid by general public.

Till Ashad 2065 the company has 1, 62,877 insured in the company worth Rs. 1,634 crore. As per Insurance Committee (Beema Samiti) rule, the company has already invested 232.65 crore of its capital. The company has insured itself with well-know reinsurance company "Hannover Re Life Reinsurance Company", Germany

Facilities (Insurance Plans) provided by NLIC

1. Endowment Assurance
2. Anticipated Plan (Money Back)
3. Child's Education And Marriage Endowment Plan

4. Child Education And Marriage Anticipated Endowment Plan
5. Salary Saving Scheme
6. Jeevan Laxmi Assurance Plan
7. Jeevan Sahara Assurance Plan

1.3.6. Life Insurance Corporation (Nepal) Limited

The first two decades of the twentieth century saw lot of growth in insurance business. From 44 companies with total business-in-force as Rs.22.44 crore, it rose to 176 companies with total business-in-force as Rs.298 crore in 1938. During the mushrooming of insurance companies many financially unsound concerns were also floated which failed miserably. However, it was much later on the 19th of January, 1956, that life insurance in India was nationalized. About 154 Indian insurance companies, 16 non-Indian companies and 75 provident were operating in India at the time of nationalization. Nationalization was accomplished in two stages; initially the management of the companies was taken over by means of an Ordinance, and later, the ownership too by means of a comprehensive bill. The Parliament of India passed the Life Insurance Corporation Act on the 19th of June 1956, and the Life Insurance Corporation of India was created on 1st September, 1956, with the objective of spreading life insurance much more widely and in particular to the rural areas with a view to reach all insurable persons in the country, providing them adequate financial cover at a reasonable cost.

LIC had 5 zonal offices, 33 divisional offices and 212 branch offices, apart from its corporate office in the year 1956. Since life insurance contracts are long term contracts and during the currency of the policy it requires a variety of services need was felt in the later years to expand the operations and place a branch office at each district headquarter. Re-organization of LIC took place and large numbers of new branch offices were opened. As a result of re-organization servicing functions were transferred to the branches, and branches were made accounting

units. It worked wonders with the performance of the corporation. It may be seen that from about 200.00 crores of New Business in 1957 the corporation crossed 1000.00 crores only in the year 1969-70, and it took another 10 years for LIC to cross 2000.00 crore mark of new business. But with re-organization happening in the early eighties, by 1985-86 LIC had already crossed 7000.00 crore Sum Assured on new policies.

Today LIC functions with 2048 fully computerized branch offices, 100 divisional offices, 7 zonal offices and the corporate office. LIC's Wide Area Network covers 100 divisional offices and connects all the branches through a Metro Area Network. LIC has tied up with some Banks and Service providers to offer on-line premium collection facility in selected cities. With a vision of providing easy access to its policyholders, LIC has launched its SATELLITE SAMPARK offices. The satellite offices are smaller, leaner and closer to the customer. The digitalized records of the satellite offices will facilitate anywhere servicing and many other conveniences in the future. LIC has issued over one crore policies during the current year. It has crossed the milestone of issuing 1,01,32,955 new policies by 15th Oct, 2005, posting a healthy growth rate of 16.67% over the corresponding period of the previous year.

Life insurance corporation (Nepal) Limited is established on 26th December, 2000 under company act 2053. Its registration number is 765-057/058. LIC (Nepal) Ltd. came into operation from September 2001 after receiving formal permission from His Nepal Government With a capital base of Rs 250 million, LIC (Nepal) Ltd. is one of the largest capitalized insurance companies of Nepal. A joint venture between LIC of India (55%) and Vishal Group (25%), the insurance company has public participation to the extent of 20%. The public issue that took place in August 2002 was a grand success as it was oversubscribed by 17 times. Nepal has 11 branch offices and one sales counter in Nepal. 20% of its share is

distributed to Public, 25% is distributed to Vishal Group Nepal and 55% to LIC of India. It is also listed in Nepal Stock Exchange. There are 11,224 public shareholders of LIC till 2063. LICN of India is a household name that needs no introduction. With over a hundred million policies in force and life fund amounting to thousands of billions of rupees, LIC of India continues to register unprecedented growth in premium income year after year even in the competitive Indian market. The international outfits of LICN of India are also making significant headway especially in the UK, Fiji, Mauritius and Bahrain. The same holds true for LICN's subsidiaries in India, namely, LICN Mutual Fund and LICN Housing Finance Ltd. LICN (Nepal) Ltd. is managed by professionals with extensive life insurance backgrounds and is led by a Managing Director having decades of exposure in life insurance administration and marketing with LIC of India. The board comprises of reliable personalities of proven excellence to direct and guide the company in strategic areas. The company has a flat structure with minimum hierarchical tiers. LICN (Nepal) Ltd. approaches the future with confidence to emerge: As an organization of social and economic significance to the country. As an organization dedicated to solvency, transparency and fair market practices for long term interest of customers. As an organization maintaining high standards of corporate excellence evoking pride in all its stakeholders (Nepal Share Market, 2008:24).

From then to now, LIC has crossed many milestones and has set unprecedented performance records in various aspects of life insurance business. The same motives which inspired our forefathers to bring insurance into existence in this country inspire us at LIC to take this message of protection to light the lamps of security in as many homes as possible and to help the people in providing security to their families.

Facilities (Insurance Policy) provided by LIC (Nepal)

- a. Endowment Policy
- b. Money Back Policy
- c. Baal Mammata/Baal Sneha
- d. Grihalaxmi
- e. Jeevan Anand

1.3.7. National Life Insurance Company Limited

National life and general insurance company is established under government act on 2044 B.S. as a public limited company. 45% share is issued for board members, foreign London Slikot Company limited holds 10% share, Rastriya Banijya Bank holds 10% share and 35% share are issued for public shareholders. Its reinsurance agreement is done with Alexander Howden Reinsurance Brokers Limited, London, Loyads members of underwriter, London and others famous reinsurance companies.

According to insurance act 2049(12-A-1) and direction of Beema Samiti, General and Life insurance company should be apart. Hence, NLGI is divided into National Life Insurance Company and national general insurance company. NLG insurance company is registered at company's registrar office in 2061/11/19 under company act 2053 and insurance act 2049. This NLG insurance company had started non life insurance business in 2062/12/20. And company had changed its company name as national life insurance company limited in 2063/1/17. This national life insurance company is sole body to do the life insurance business.

Facilities (Insurance Plan) Provided by National Life Insurance Company

- a. Endowment Life Assurance Policy
- b. Child's Education and Marriage Endowment Life Assurance Policy
- c. Endowment With Accidental Double Benefits Life Assurance Policy

- d. Anticipated Endowment Life Assurance Policy
- e. Level Term Life Assurance Policy
- f. Decreasing Term Life Assurance Policy
- g. Whole Life Assurance Policy

1.3.6 Prime Life Insurance Company Limited

PLIC was initiated by Khetan Group and was incorporated as a public limited company in June 2007. The share holding constitutes of the promoters holding 70 percent and 30 percent is to be offered to general public. The promoters represent Nepal's leading and highly prominent business groups having widely diversified business interests and expertise. Laxmi Bank Limited, one of the leading commercial banks in Nepal, is one of the major promoters with 15 percent stake. We plan to offer the equity shares to general public within one year of commencement of our business.

At Prime, we believe in innovation, superior customer services, transparency and good governance. Customer delight is our guiding principle and delivering life insurance products to meet the requirements of all segments of our customer base supported by the best technology is our business philosophy.

1.3.7 Others

The newly established Gurans, Asian and Surya life insurance companies have not yet published any authorized brochure and prospectus. Prime Life Insurance (PLI), Gurans Life Insurance (GLI), Surya Life Insurance (SLI) and Asian Life Insurance (ALI) are floating 1.1 million-unit shares worth Rs 110 million each as life insurance companies need to have Rs 360 million for life insurance while non-life insurance companies need to have Rs 100 million, according to the new regulation.

1.4. Statement of the Problem

The insurance company being financial institution/intermediaries need to enterprise themselves between surplus units, those units with excess fund and deficit units that need fund. Being the intermediaries, they receive funds from surplus units, paying them a rate of return on the fund and supply those funds to the deficit units, charging a higher rate of return.”

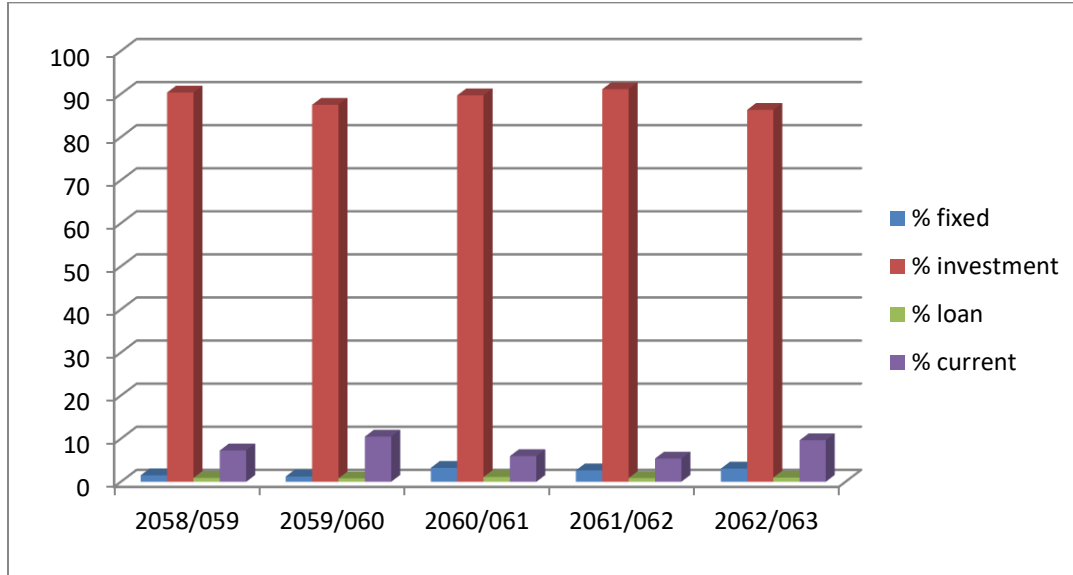
Table 1.1
Distribution of Assets, Investment and Loan Pattern of Life Insurance
Companies of Nepal in Aggregate

Year	2058/059	2059/060	2060/061	2061/062	2062/063
Assets	Amount (in Rs)	Amount (in Rs)	Amount (in Rs)	Amount (in Rs)	Amount (in Rs)
Fixed	20752356	27919708	109561169	127423799	221893097
Investment	1249912266	1997301975	3035441036	4379363250	6265319020
Loan	12393848	18153741	37615512	41182060	71029731
Current	100628769	239376057	201481525	258468385	698966485
Total	1383687239	2282751481	3384099242	4806437494	7257208333
Calculation in %					
% fixed	1.499786615	1.223072605	3.237528251	2.651106961	3.057554459
% investment	90.33199344	87.49537528	89.69716367	91.11453661	86.33235719
% loan	0.895711665	0.795257002	1.111536906	0.856810477	0.978747305
% current	7.272508278	10.48629511	5.953771169	5.377545954	9.631341047
Total %	100	100	100	100	100

Source: Various Annual Reports of Respective Life Insurance Companies and Beema Samiti.

Chart 1.3

**Distribution of Assets, Investment and Loan Pattern of Life Insurance
Company of Nepal in Aggregate**



In the light of the data from fiscal year 2058/059 to 2062/063 shown in Table No.1.1, it can be said that the insurers hold major part of their assets as investment and loans. Insurers more than 80% of the assets are always included within the head “investment and loans”. Hence, investment will be major part of their whole functioning. In practice the flow of the funds from the insurance companies toward capital and money market will be quite huge. The table number one will be evident to the fact. From investment aspect, the insurance industry performs as financial institutions. The insurance performance as financial institution will be guided by their investment policies and its implementation. Hence investment will be major part of their whole functioning. From investment aspect, the insurance industry performs as financial institutions, while considering the investment policy and its implementation there arises these two basic problems.

1. To maintain the desired composition of investment portfolios this suits best according to the line of primary business i.e. insurance business.

2. To attain significant return from the composition of investment portfolios that will be more contributing with respect to the revenue generate from the basic line of business. i.e. insurance business.

To be successful in their functioning as financial institution, the insurer needs to tackle these two problems successfully. The historical pattern of investment among portfolios indicates that they are heavily concentrated on few investment portfolios, which are approved as “Compulsory Sectors”, by the regulatory provision. So in Nepalese context, it seems that the insurers are/were unable to satisfy the above two problems. Insurance business is a multi-dimensional business. The establishment of new industries and factories, growing number of trading companies, growing awareness of people, government’s interest in insurance, provision of compulsory insurance, provision of insurance board and enactment of laws and rules regarding insurance business are the positive indicator of the good future prospect of insurance business in Nepal. But the provision of reinsurance in Nepal is a critical issue for Nepalese insurance business. Moreover, the increasing violence and terrorism has threatening the insurance business. Lack of sufficient number of industries, limited market of opportunities, low per capita income, lack of knowledge of insurance, lack of profitable investment opportunities poses a serious threat to the insurance business in Nepal. In this context there is the dearth of the study of the steady of the financial operation of the insurance business in Nepal.

While looking on the Balance Sheet and Profit and Loss Account of insurance companies, reflects the fact that the companies are earning profit each year, however it is not significant and satisfactory against the volume of transaction. The volumes of transaction are increasing tremendously year by year but the growth of net earning is not in the same ratio. It is because of price cutting under

rating and cut-throat competition in the market. The other reasons for earning less net amount by the insurance companies are (as follows):-

1. Time consuming procedures in accepting, issuing and dispatching policy.
2. Practice of only traditional policies, practices and schemes.
3. Less attention in arrangements due to budgetary constraints on refreshment to clients.

The big problem of such institutions is to collect premium and mobilize in suitable sector. Nepal is an under developed country and more than 70% of people live in village and are also illiterate. The geographical situation also doesn't favor for the expansion of insurance activities. Most of the Nepalese people do not have faith on insurance and also have not living standard to get insurance services. Poverty is also main cause to have dropped the insurance business. The main problems of these insurance companies are finance and collection of premium fund. Finance means to sources of fund and its proper utilization.

Thus this study concentrates on finding the reasons upon which the investment pattern of insurers are taking place and evaluating the investing performance against the performance of their basic line of business. Further, some policy and practical issues relating the investment aspect among the insurers are analyzed to examine the investment policy adopted and implemented by the insurers. This study aims to analyze and find out answers through various methods of analysis as well as using various techniques.

1.5 Objectives of the Study

Every study has their objectives. There are so many objectives of this study but basic aim of this study is to define current situation of life insurance industry in Nepal and find out premium collection and investment position of life insurance companies opening within the Nepalese insurance industry as well as to evaluate

their investment policy and strategy based on their own goal and financial character.. For this purpose, these specific objectives are spelled out as:-

1. To compare the various life insurance companies premium collection and investment pattern.
2. To examine the trend and pattern of investment and premium collection.
3. To examine and compare the financial position of life insurance companies.
4. To recommend probable corrective measures relating to the improvement of the premium collection and investment aspect.

1.6 Significance of the Study

At present, insurance has been part and parcel of the business organization. The process of insurance has been involved to safeguard the interest of people for uncertainty by providing certainty of payment at a given contingency. It is equally important to the individuals and to the nation as well. Insurance business plays an eminent role in the industrialization of the country. Due to lack of full fledged capital market, the insurance companies don't have sufficient investment opportunities. Insurance companies also have to the intense competition in a limited market territory. In this context, the financial position analysis would analyze the strengths, weaknesses, opportunities and threats of the selected insurance companies. The study no doubt will also have multi-dimensional importance for various areas which are mentioned below:-

1. Importance to the management of the insurance companies.
2. Importance to the policy makers, academic and professional people.
3. Importance to the shareholders, investors, customers, competitors, personnel and other key stakeholders.
4. The insurance will have a huge amount to invest, which they collect as individual savings or as the cost being insured. So the study analysis the premium collection and investment patterns.

5. This study helps insurance companies to identify its hidden weakness regarding financial administration and the necessity of the present study is justified.
6. By the proper use of investment and its return, insurer can reduce the net cost of the insurance for an individual, which will affect not only the micro aspect but also macro aspect, too.
7. The study focuses the insurance market and possibility of future expansion and is also concerned to trace the weak area to suggest for its improvements.

Now a day, liberal economic policy has been adopted and government emphasized the privatization policy. When the policy breaks the monopoly system and brings competition in this insurance business. So many private insurance companies have been opening now. Due to cut throat competition in insurance business by private insurance companies management has to be made efficient; on the other hand, premium rate has to be reduced. Reduction in rate brings the strong possibilities of reduction in profit volume, but at the same time can make people motivate to insurance. Insurance companies know about the current situation of insurance companies of Nepal. That helps them to take decision to establish new insurance company in Nepal. For seeing this fact, the study concentrates as analyzing about premium collection and investment related matters among the insurers, which is beneficial for insurance business.

1.7 Limitation of the Study

The study aims at findings the facts and the trend or pattern of the investment and premium collection within the life insurance companies. Therefore the scope is limited within the insurance companies operating. As this study is conducted for the partial fulfillment of MBS degrees, it is not comprehensive research work and it focused to analyze about premium collection and investment related matters. Every activity has its own boundary as the same way this study has also some

boundaries, which cannot be ignored. These boundaries are called limitations of this study. Some limitations of purpose of study are stated as under:

1. The whole study is based on secondary data such as annual report of insurance companies, journals, magazines, booklets. The authenticity of which has not been questioned. The record of assets on the data of balance sheet may not reflect the future market value of the assets. The study is also based on data collected from the life insurance companies presently running in Nepal.
2. The study is limited due to time and availability of data.
3. The term 'industry' means the composite of insurance business in aggregate. The entire insurance industry is divided as 'Life Insurance Industry' and 'Non Life Insurance Industry'.
4. This study covers only the area of premium collection and investment, beside this other area is not touched. Thus, the study will be limited to the variables, which can be exposed in quantitative terms by fitting into financial and statistical tools of analysis.
5. The cumulative data of investment are used in the study.
6. Research experience is also the major limitation.
7. The fields of investment among the insurers are classified as :-
 - a. Compulsory Sector
 - i. Government Securities
 - ii. Bank Fixed Deposits
 - b. Optional Sector
 - i. Corporate Securities
 - ii. Finance Companies Fixed Deposits.
 - iii. Others (It means the investment in housing projects, mutual fund, and vehicle and other fields as approved by the insurance Committee).
 - c. Loan and Advances.
8. This study covers only selected company listed in the NEPSE.

1.8. Organization of the Study

The whole study is based on secondary and primary data collected for concerned life insurance companies, Beema Samiti, NEPSE and other relevant sources. Here the study is computed utilizing many analytical tools by separating following five chapters.

Chapter -I: It includes the introduction, problem of the study, objective of the study, importance of the study, limitations of the study and methods of analysis.

Chapter -II: This Chapter includes review of literature. The researcher has divided this chapter in two portions, first being theoretical framework and second is review of previous studies.

Chapter - III: The chapter three includes research methodology, research design nature and sources of data, data gathering procedure presentation of data and analysis of technique and tools. Research design consists of research design and research tools.

Chapter - IV: Fourth chapter of this study is concern with data presentation and analysis. This is the main tabular and other firms. Various statistical presentations are used for analyzing the collected data from different sources. Actual sources result is obtained after analysis of data by using financial and statistical tools and techniques. The major findings are drawn after analysis of data.

Chapter -V: This chapter includes findings in aggregate, conclusion drawn through the findings, and the probable suggestions and solutions as 'recommendations' enlightened through the study.

And bibliography and appendices will be presented at the end.

CHAPTER - II

REVIEW OF LITERATURE

2.2 Conceptual Framework

2.2.1 Meaning of Insurance

The modern society is developing day by day. This developing modern society plays vital and various roles in a society. They bear a major character, the inevitable uncertainty surroundings. Due to the uncertainty and competition factor the concept of insurance and its evolution was enforced and these days it is far more strengthening due to very competitive environment and many 'dropped down' situations. Thus, the insurance seems as an auxiliary for the modern society and organized business company as well as individuals. Insurance is one of the major risks handling method, also it is an instrument to spread the loss caused by a particular risk among various people who are interested to accept risk for certain return. The word for taking risk or assuring to cover risk is known as insurance. Before familiarizing about details of insurance it is essential to know about risk and risk management.

Risk

Risk is a concept that denotes the precise probability of specific eventualities. Technically, the notion of risk is independent from the notion of value, and as such, eventualities may have both beneficial and adverse consequences. However in general usage the convention is to focus only on potential negative impact to some characteristic of value that may arise from a future event. Generally risk can be defined as the probability of the occurrence of unfavorable outcome. However risk has different context. Risk means uncertainty about future losses, or in the other words, the inability to predict the occurrence or size of a loss. There are different meanings of risk. it can be defined at statistical terms and in insurance

terms too. In the context of insurance, it takes restricted sense and is mainly used to mean the uncertainty of the occurrence of economic loss. It eliminates the losses other than the economic loss and the uncertainty of the occurrence of loss and the subject matter will be basic requirement. So risk is the key element for making insurance desirable and possible. Every one wants to save own self from the risk or unfavorable situation. Thus, the people want to safeguard lay insuring them to the insurance companies. If there is no risk in the world, then why anyone should be insured.

Definitions of Risk

The chance that an investment's actual return will be different than expected. This includes the possibility of losing some or all of the original investment. Risk is usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment.

There are many definitions of risk that vary by specific application and situational context. One is that risk is an issue, which can be avoided or mitigated (wherein an issue is a potential problem that has to be fixed now.) Risk is described both qualitatively and quantitatively. In some texts risk is described as a situation which would lead to negative consequences.

Qualitatively, risk is proportional to both the expected losses which may be caused by an event and to the probability of this event. Greater loss and greater event likelihood result in a greater overall risk.

Frequently in the subject matter literature, risk is defined in pseudo-formal forms where the components of the definition are vague and ill-defined, for example, risk is considered as an indicator of threat, or depends on threats, vulnerability, impact and uncertainty.

In engineering, the definition risk often simply is

$$\text{Risk} = (\text{Probability of an accident}) \times (\text{Losses per accident})$$

or, in more general terms:

$$\text{Risk} = (\text{Probability of risk occurring}) \times (\text{Impact of risk occurring})$$

There are more sophisticated definitions; however, measuring engineering risk is often difficult, especially in potentially dangerous industries such as nuclear energy. Often, the probability of a negative event is estimated by using the frequency of past similar events or by event-tree methods, but probabilities for rare failures may be difficult to estimate if an event tree cannot be formulated. Methods to calculate the cost of the loss of human life vary depending on the purpose of the calculation. Specific methods include what people are willing to pay to insure against death, and radiological release. There are many formal methods used to assess or to "measure" risk, considered as one of the critical indicators important for human decision making.

Financial risk is often defined as the unexpected variability or volatility of returns and thus includes both potential worse-than-expected as well as better-than-expected returns. References to negative risk below should be read as applying to positive impacts or opportunity (e.g., for "loss" read "loss or gain") unless the context precludes.

In statistics, risk is often mapped to the probability of some event which is seen as undesirable. Usually, the probability of that event and some assessment of its expected harm must be combined into a believable scenario (an outcome), which combines the set of risk, regret and reward probabilities into an expected value for that outcome. Thus, in statistical decision theory, the risk function of an estimator $\delta(x)$ for a parameter θ , calculated from some observables x , is defined as the expectation value of the loss function L ,

$$R(\theta, \delta(x)) = \int L(\theta, \delta(x))f(x/\theta)dx$$

In information security, a risk is defined as a function of three variables:

1. The probability that there is a threat.
2. The probability that there are any vulnerabilities.
3. The potential impact.

If any of these variables approaches zero, the overall risk approaches zero. The management of actuarial risk is called risk management.

Risk Management

Risk management is the systematic and efficient handling of pure risks. In simple words, risk management is the planning, organizing, directing coordinating and controlling process of risk. In practice risk management is the device and process of decision making for either personnel or organizational risky situation. We have a clear concept of risk in the context of insurance. After it, the risk management concept is also essential to understand. "A general management function that seeks to identify, assess and address the cause and effects of uncertainty and risk on an organization to the purpose of risk management is to be enable an organization to progress towards its goal and objectives in the direct efficient and effective path" (Smith and Young, 1995: 27) while the managing the risk there are various alternatives standing i.e. risk may be avoided retained, reduced and shifted to other. Such alternatives are driven by either the risk financing aspect or the risk control aspects.

Risk management is a structured approach to managing uncertainty related to a threat, a sequence of human activities including: risk assessment, strategies development to manage it, and mitigation of risk using managerial resources. The strategies include transferring 'the risk' to another party, avoiding the risk,

reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk. Some traditional risk managements are focused on risks stemming from physical or legal causes (e.g. natural disasters or fires, accidents, death and lawsuits). Financial risk management, on the other hand, focuses on risks that can be managed using traded financial instruments. The objective of risk management is to reduce different risks related to a pre-selected domain to the level accepted by society. It may refer to numerous types of threats caused by environment, technology, humans, organizations and politics. On the other hand it involves all means available for humans, or in particular, for a risk management entity (person, staff, and organization).

In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process can be very difficult, and balancing between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability of occurrence can often be mishandled.

Intangible risk management identifies a new type of risk - a risk that has a 100% probability of occurring but is ignored by the organization due to a lack of identification ability. For example, when deficient knowledge is applied to a situation, a knowledge risk materializes. Relationship risk appears when ineffective collaboration occurs. Process-engagement risk may be an issue when ineffective operational procedures are applied. These risks directly reduce the productivity of knowledge workers, decrease cost effectiveness, profitability, service, quality, reputation, brand value, and earnings quality. Intangible risk management allows risk management to create immediate value from the identification and reduction of risks that reduce productivity.

Risk management also faces difficulties allocating resources. This is the idea of opportunity cost. Resources spent on risk management could have been spent on more profitable activities. Again, ideal risk management minimizes spending while maximizing the reduction of the negative effects of risks.

Risk Management and Insurance

Risk controlling aspect enforce an reducing the probability of loss by implementing the risk reduction techniques and risk financing aspects enforce an being in financially secured position before the loss occur. Thus, insurance and its management will be a part of risk management, which falls within the risk financing aspect rather than risk controlling aspects (Smith and Young, 1995:27).

2.1.2. Insurance

A contract (policy) in which an individual or entity receives financial protection or reimbursement against losses from an insurance company. The company pools clients' risks to make payments more affordable for the insured.

Insurance, in law and economics, is a form of risk management primarily used to hedge against the risk of a contingent loss. Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for a premium. An insurer is a company selling the insurance. The insurance rate is a factor used to determine the amount, called the premium, to be charged for a certain amount of insurance coverage. Risk management, the practice of appraising and controlling risk, has evolved as a discrete field of study and practice.

Insurance has been introduced to safeguard the interest of people from uncertainty by providing certainly of payment at a given contingency. An insurance company means the enterprises that are involved in insurance business. Insurance companies are integrated part of the same business. Before knowing about

insurance company's concept we need to know about concept of insurance. It is quite hard to define insurance to satisfy every view point of insurance.

Insurance concept is defined in different ways; some of the important concepts are stated as under:

a. Cooperative Concept or Functional Definition

“Insurance is indispensable to free economy and a free society because it not only protects the values produced by men and women who work for themselves but fastens the confidence to produce more” (Bainbridge, 1952: 15).

“Insurance is a co-operative device to spread the loss by particular risk over a number of persons who are exposed to it and who agree to insure them selves against the risk” (Mishra, 1979: 5).

“Insurance may be defined as a device for reducing risk by combining a sufficient number of exposure units to make their individual losses collectively predictable. The predictable loss is then shared proportionately by all units in the combination” (Mehr, 1972: 72).

“Insurance is a cooperative form of distributing a certain risk over a group of persons exposed it” (Ghosh and Agrawal, 1959: 2).

“As a business institution, insurance has been defined as a plan by which large number of people associate themselves and transfer to the shoulder of all risk that attach to an individuals” (Magee, 1959: 2).

From the above definition , we came to know that insurance is a compensation for uncertain happening of any loss which are assured for certain period of time and

for specific amount, human life and property are subject to the risk of loss or damage from the various sources. The persons on whom such losses fall suffer financially and practically ruined in several cases. The basic concept of insurance is a method of sharing financial loss of a few from the common fund out of contribution of the many who are equally exposed to the same loss.

b. Legal Concept or Contractual Definition

“A contract whereby one person called insurance undertakes, in the return for the agreed consideration called the premium to pay another person called the assured a sum of money or its equivalent on the happening of a specified event” (Hardy and Irmay, 1979: 3).

“Insurance may be defined as a consisting one party (the insurer) agrees to pay to the other party (the insured) or his beneficiary, a certain sum upon a given contingency (the risk) against which is sought (Mishra, 1979: 5).

In the legal document, one party is called the insurer and another party is called the insured. The person who protects another against risks is known as insurer, while the person who is protected against the risk is known as insured. The documents where in the terms and conditions of the contracts are started are known the insurance policy. The amount for which a policy is taken out is called insured amount. The consideration which the insured has to pay insurer is known as the premium.

Thus insurance is the means of transforming risks whereas the insurer (Insurance company) undertaking to pay the insured a sum of money on the happening of specific event. In other words an insurance company promises to pay a certain sum of money for the happening of the specified event in exchange for all small monetary payments. In fact “Insurance distributes the cost of risk over a large

group of individuals subjected to the some risk in order to reimburse the few who actually suffer from the risk” (Ackerman, 1951: 3).

2.1.3 Evolution of Insurance

In some sense we can say that insurance appears simultaneously with the appearance of human society. We know of two types of economies in human societies: money economies (with markets, money, financial instruments and so on) and non-money or natural economies (without money, markets, financial instruments and so on). The second type is a more ancient form than the first. In such an economy and community, we can see insurance in the form of people helping each other. For example, if a house burns down, the members of the community help build a new one. Should the same thing happen to one's neighbor, the other neighbors must help. Otherwise, neighbors will not receive help in the future. This type of insurance has survived to the present day in some countries where modern money economy with its financial instruments is not widespread (for example countries in the territory of the former Soviet Union).

Turning to insurance in the modern sense (i.e., insurance in a modern money economy, in which insurance is part of the financial sphere), early methods of transferring or distributing risk were practiced by Chinese and Babylonian traders as long ago as the 3rd and 2nd millennia BC, respectively. Chinese merchants traveling treacherous river rapids would redistribute their wares across many vessels to limit the loss due to any single vessel's capsizing. The Babylonians developed a system which was recorded in the famous Code of Hammurabi, c. 1750 BC, and practiced by early Mediterranean sailing merchants. If a merchant received a loan to fund his shipment, he would pay the lender an additional sum in exchange for the lender's guarantee to cancel the loan should the shipment be stolen.

A thousand years later, the inhabitants of Rhodes invented the concept of the 'general average'. Merchants whose goods were being shipped together would pay a proportionally divided premium which would be used to reimburse any merchant whose goods were jettisoned during storm or sink age.

The Greeks and Romans introduced the origins of health and life insurance c. 600 AD when they organized guilds called "benevolent societies" which cared for the families and paid funeral expenses of members upon death. Guilds in the middle ages served a similar purpose. The Talmud deals with several aspects of insuring goods. Before insurance was established in the late 17th century, "friendly societies" existed in England, in which people donated amounts of money to a general sum that could be used for emergencies. Separate insurance contracts (i.e., insurance policies not bundled with loans or other kinds of contracts) were invented in Genoa in the 14th century, as were insurance pools backed by pledges of landed estates. These new insurance contracts allowed insurance to be separated from investment, a separation of roles that first proved useful in marine insurance. Insurance became far more sophisticated in post-Renaissance Europe, and specialized varieties developed (Mehr and Camack, 1976: 34 – 37).

There is word "Yogaksh ema" in Rig-Veda, which means security. About three thousand years ago racial insurance was existence in the Arya community of India. But before four century B.C., there was the use of Bottomward banks under the marine insurance in Greece. Existence of life insurance annuity was found during the period of Roman emperor. At first, Church of England sued to make religious guild. Letter on farming the merchant guild, started to give protection to the members further later on crafts guild began to work as subsidiary of the merchant's guild. In this way the concept of insurance is evolved. The development of modern formal insurance can be described in the following phase (Ackerman, 1951: 3).

First phase: Emergence of Marine Insurances

After the emergences of the concept of insurance, it was most commonly used for marine insurance. Marine insurance is the first modern form of insurance in the history of insurance. In the 1300 A.D. the first insurance contract called ploizza was made in Italy. Later on the work policy was developed from ploizza. The concept of marine insurance was commonly used in Lombard of Italy and in Venice in 14th century. In fact the Lombard of northern Italy had main role in bringing the international extension of marine insurance in England. Later the Jewish of Lombard was banished and then they settled in different countries of Europe. The name of street "Lombard Street" of London was named after the name of Lombard. At that time this street was called the central point of marine insurance.

The significant role of LLOYD institution the development of insurance can not be ignored the underwriters who took the marine risk used to carry out the work of marine insurance meeting personally in the coffee house of Edberg Lloyd in the tower of street of England. Slowly the coffeehouse was successful to introduce itself as a centre of marine insurance. The Lloyed institutions established in 1771 is the first institution to make formal marine insurance. Till new this institutions is the once of the most popular insurance company in the world.

Second Phase: Development of Life Insurance

After the development of marine insurance, people used the concept of insurance to provide security to their lives. To talk about the modern life insurance by an associate 14 persons the first life insurance policy of the world was issued is the name of person named 'William Gibbon's in 1538 A.D. It is recorded that insurance policy was issued for 1 year. An astronomer named ' Admard Heley ' submitted a ' mortality Table in 1663 A.D. to the royal society. This mortality table was useful the royal society. This mortality table was useful tool for

calculating insured amount. But the first life insurance institution insured amount technology on the basis of data.

In 1744 A.D, the foundation of the modern insurance was created by passing the life insurance act. There after different laws enacted to remove the defect that came to it on the basis of experience with the cause of the difficulties that came to the business, many companies were closed and some of them went and mixing or merging with another insurance companies there is no controversy that the life insurance act 1870 was passed to control the operation of the life insurance business for protection of the customers. Before the beginning of the 19th century many life insurance were already established in the world. We find that the life insurance business in our neighboring country India had started with the establishment of mutual association. In 1971 both life and non-life insurance were nationalized in India, as a result life insurance corporation for life insurance and General insurance company Ltd for non life insurance were established. During the reign of Elizabeth 1st the life insurance used to be effected for only one year. After one year, if it was not renewed that insurance automatically used to be cancelled. But the job of effecting long term insurance started from 18th century has been increased continuously.

Third Phase: Emergence of Fire Insurance

In the history of insurance the fire insurance comes after the life insurance. However there is some controversy about it. In the opinion of some people, the concept of the fire insurance had come after the marine insurance and then only after about two hundred year. The idea of life insurance was communicated. The function of the fire insurance was done in the 14th century. The beginning of the fire insurance for the first time can be found in the municipality of Ham berg in Germany in the 13th century, it is said that after the birth of life insurance that fire insurance was developed.

In the 1666 AD, after the fierce fire, many building were turned into ash in England. It is known from history of insurance that many people were in difficulties so the fire insurance was introduced with main objective of providing the financial protection to the people to save from risk and ruin. In the 1680 AD, Dr. Michlos Barbon has started the first business related with fire insurance in England. The office of Barbon was called fire office, later named a phoenix. In 1782 the phoenix insurance company was established with the development of fire insurance today many people industry and businessmen are the breathing the air of peace.

Fourth Phase: Practice of Miscellaneous Insurance

After the fire insurance, many other types of insurance hare come in use. Thus by such insurance policies men is trying to be protected from any types of risks. Under the miscellaneous insurance fidelity guaranteed insurance started from 1875public liability insurance from 1877, burglary and house breaking insurance from 1903, motor insurance from 1911 and aviation insurance were come in practice. Similarly in other insurance we can consider cattle insurance, rain insurance and earthquake insurance the vocal of the male singer and female singer, model beauty as miscellaneous insurance.

In the Context of Nepal

In our society, the concept of insurance can be traced down to the, Guthi systems and joint family culture that has been prevalent since the ancient times. There system have provided security and assistance of individuals and families in the time of need with the change in the economic and social perspectives and the increasing complexities of the upcoming small-scale industries an immense need for a domestic insurance company was felt to insure against any loss that could arise due to mishaps in industries.

With the development of trade commerce and industry, the necessity of insurance in our country was felt long ago. But there was no evidence of any organized form of insurance in Nepal until 1947. Society was organized on an agricultural basis and the socio-economic organization took care of any problem or calamity confronted to the community. The fire insurance in Nepal at first was started by "Mal Chalani Ra Beema" (Transport and insurance company). The "National fire insurance company" of Calcutta is the first insurance company to open branch in Kathmandu in 1958 to transact fire insurance business in Nepal.

With the development of trade and industry establishment of Nepal Rastra Bank (central bank), Nepal Bank Ltd (Commercial Bank), Rastriya Banijya Bank (Commercial Bank), Agricultural Development Bank, Co-operative Bank, Nepal Industrial Development Corporation numerous other companies and corporations the need of fire insurance in Nepal is growing in a manifold way. To meet ever-growing needs of fire insurance Indian branches such as "Ruby", "Oriental", "Sterling General" and "Hindustan General" and the domestic insurance company "Insurance and Transport Company" and "Rastriya Beema Sasthan" are transacting fire insurance business.

Though there is no organized form of life insurance in Nepal, a kind of life which can be better termed "death insurance" is practiced since a long time like insurance there is "Guthee" which helps its member in facing financial burden out of death. Its policy holders are known as "Gutheer" instead of insured. Though they have not got policies black and white they have a kind of verbal understanding by which they can work smoothly without facing any difficulties. Gutheer's pay certain amount money to the "Guthee" in the same way as the insured pays premium to the insurer. Before 1951, Patna branch of Indian Life Insurance Company was exploring life insurance business with the nationalization of "Life Insurance Corporation of India". It is slowly and wholly transacting life assurance

business in Nepal. It established a branch office in Kathmandu in 1962. Thus this corporation has got a kind of monopoly in life insurance business. However a need for an insurance company that would incorporate every type of insurance function was also felt at the national level. This resulted to establishment of Rastrya Beema Santhan on 15th December 1968. The company was establishment as private company with an authorized capital of Rs 1 crore and capital issued was Rs 25 lakh under the Nepal company act 2011. The company started its business by insuring king Mahendra's car. Later, the company started operating with same name but under national insurance corporation act 2025. On Feb 21, 1973, fire year after its establishment life insurance was introduced.

After the introduction of insurance act, 1992 the number of private insurance companies came into existence.

2.1.4 Types of Insurance

All the insurance companies provided certainty against the risk. When they can define in the generic concept, it will take the form like social insurance and private insurance. But we have divided the insurance in two parts as life insurance and general insurance. Life insurance may be defined as the contract, where by the insurer in consideration of a premium, undertakes to pay a certain sum of money either on the death of the insured or on the expiry of a fixed period. Life insurance is concerned only about physical and mental accident risk. General insurance considers all insurance expect life insurance. However, we can classify the insurance as a life insurance and non life insurance.

Life insurance companies, which sell life insurance, annuities and pensions products. Non-life, General, or Property/Casualty insurance companies, which sell other types of insurance. In most countries, life and non-life insurers are subject to different regulatory regimes and different tax and accounting rules. The main

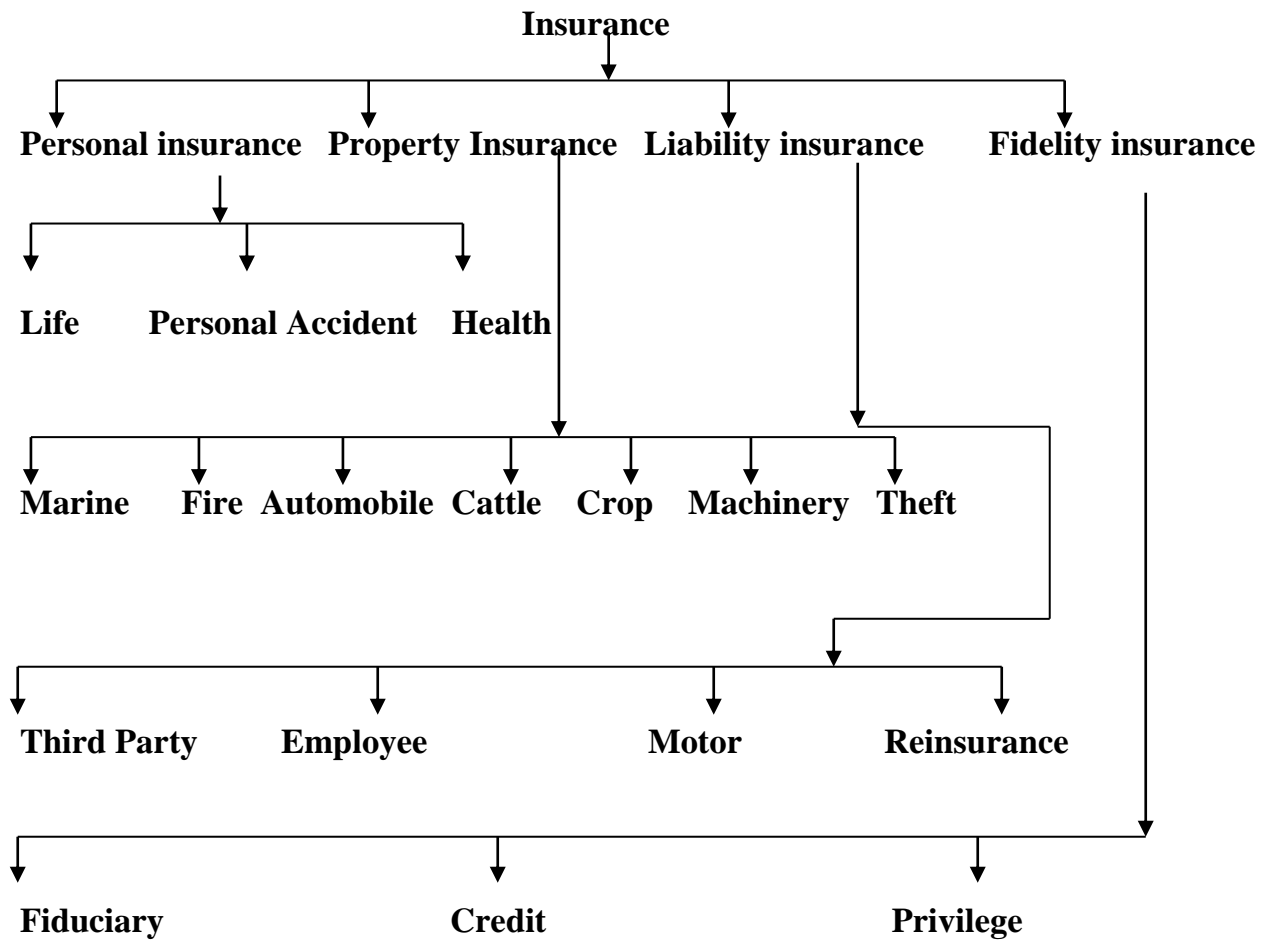
reason for the distinction between the two types of company is that life, annuity, and pension business is very long-term in nature, coverage for life assurance or a pension can cover risks over many decades. By contrast, non-life insurance cover usually covers a shorter period, such as one year.

Some of experts and writers separates the insurance in different viewpoint i.e. forms the potential insurers view and other. When viewed from professional use insurance will take two broad forms as life insurance and non-life insurance.

Insurance has been the most effective and strongest to save peoples property. It makes the security of the payment of insured among those who made life and non-life insurance. Now a days, insurance has becomes the pillar of alertness courage and eagerness to develop life and living standard of common people, industrialist and traders of the world. So, various types of insurance are developed. We can see all the insurance under risk point of view in following way.

Figure 2.1

Kinds of Insurance from Risk Point of View



(Mishra, 1995)

(A) From Risk Point View

a. Personal Insurance

Under personal insurance, the insurance is made to the subject related to the person's life. There is possibility of risk associated to death, accident and diseases. The insurance which is affected against such risks with the objectives of getting financial protection is called insurance. Life insurance, personal accident insurance and health insurance are the examples of personal insurance.

ii. Property Insurance

Under this insurance, insurance of the different nature property is affected to compensate the property damaged or lost. The compensation is given to the assured by the insurance company. The insurance company gives only actual compensation to an insured on the basis of fact and event the examples of property insurance are fire insurance, marine crops, cattle and burglary insurance etc.

iii. Liability Insurance

Under this insurance, compensation is given to third person for loss or damage caused by negligence, or other reason of the party. The example of liability insurance is motor insurance, public liability insurance etc.

iv. Guarantee (Fidelity) Insurance

Under this guarantee insurance the insurance company gives the guarantee of faithfulness or the honesty of any employee or any other person and it accepts the liability of compensation on financial loss to the insured with the cause of dishonesty and fraud. The examples of guarantee insurance are credit right, fidelity guarantee insurance etc. If any event is found within the policy, then the insured has right to get compensation.

(B) From Business Point View

There are following types of insurance from business point view :-

i. Life Insurance

Insurance provides protection against a wide variety of risks. However life insurance provides sum of amount against the various risks relating to the human being body through issuing different policies. Life insurance is a financial instrument for providing post death resources to support survivors or pay obligations of the estate of the deceased. Generally, life insurance as a type of insurance plan conducted by the insurers is directly related with providing assurance against the economic part of total human life. "Life insurance contract

may be defined as the contract where by the insurer in consideration of premium under takes, to pay a certain sum of money either on the death of the insured or on the expiry of a fixed period " (Mishra,1979: 49).

Life insurance is particularly concerned with that aspect of human life. Since the insurance or assurance of a person's life is impossible because of the certainty of death of a person once born, life insurance only provides assurance against the economic aspect of human life, not the assurance against the life itself. Life insurance provides future benefits against unseen future accident and it helps to live comfort in retirement life. Life insurance never fulfill losses of human life, it measures in amount of various risks and provides sum of amount in accordance to policy. It plays vital role in the society. Therefore, it is also known as social insurance too.

Nepal insurance act 2049 (section2-1) has defined life insurance as the contract of insurance effected on human life on the basis of age to pay a fixed sum to the assured or his nominee, on death or on the happening of any contingency , dependent on human life in consideration of payment of fixed investment premium by the assumed . Insurance companies provide the life insurance under various polices. Insurer provided various polices in accordance insured interest and desire. We can see following policy in life insurance commonly: Endowment policy, Endowment Assurance with Double Accident Death Benefit, Whole life policy annuity, Anticipated Endowment Life Assurance, Children's Marriage and Education Endowment Life Assurance, Term insurance and Survivorship policy.

In Nepal, Rastrya Beema Sasthan, National Life Insurance Co. Ltd, Nepal Life Insurance Co. Ltd, Life Insurance Corporation (Nepal) Ltd, American Life Insurance Co. Ltd, and newly established Prime, Gurans, Asian and Surya Life Insurance Company Ltd, provides life insurance services. The scope of life

insurance business is seemed to be bright because of its nature and popularity. So the various investors are interested to invest in life insurance business, although having restriction of Government and challengers of other effecting factors.

ii. Non-Life Insurance

It is also known as general insurance. It is a pure insurance because it can measure any risk in term of money. General insurance is the insurance of property and liabilities risk of insured against some specified cost i.e. the premium, it includes property insurance liability insurance and other forms of insurance. General insurance considers all the risk and it provides certainty against the risk through certain some of money. This part of insurance includes the insurance and risk transfer of the property and liability of insured where "property insurance against less arising from the ownership or use of property, includes two general classifications. The first indemnifies the insured in the event of loss growing out of damages too, or destruction of his /her own property. The second form pays damages for which the insured is legally liable the consequence of negligent acts that result in injuries to other persons or damage to their property. This is known as "liability insurance" (Bickelhaupt, 2000: 81).

General insurance responsible to payment of an amount to insured. But when the accident is held by negligent of insured where the insurer does not responsible to pay any amount against the risk. Insurer and insured may agreed to accept every kind of risk under their contract and the risk transfer through the assurance. But the "coverage written by the property and liability insurance insurers may be divided into fives types, physical damage or loss, loss of income and extra expenses resulting from physical damage to property, liability, health and surety (Mehr, 2001: 11). In practice the insurers provided various types of non life insurance policies, which are based upon there, classification, among them these are the practical form:-

Marine Insurance Policy

It is oldest form of insurance. It is written to provide the security against the perils of sea. Usually such policies provide the assurance not only against the natural disaster but also against piracy and other manmade disaster. Further the modified marine insurance policy may provide protection against the inland transit loss arising in the way to seller to buyer protection against loading and unloading or other mutually agreed risk with respect to the marine insurance a destination is customarily made between insurance written on shipment over land by such carrier as Rails, road, and trucks which is referred to as inland marine insurance and those that involve sea perils referred to as ocean marine insurance.

Fire Insurance Policy

Fire insurance had been originated in Germany in the beginning of sixteenth century. Fire insurance policies are issued to indemnify owners of property, whether buildings or content, against destruction or damage caused by the fire. “Basic form of the fire insurance offers protection to the insured against the destruction of physical property as a result of fire.” (Welshman and Melcher, 1980: 213). There may be various caused to extent an accident by fire. Insurer is only responsible to provide indemnity against risk, which was held at accordance to policy. The field of fire insurance can be modified or extended to include a number of peril closely allied to fire like wind, storm, earthquake, or else . Insurance may change higher premium as per nature of risk and insurance policy.

Aviation Insurance Policy

Aviation insurance is related with the risk occurring due to the peril, hazard or risks created by the aircraft. Aviation insurance provides the indemnity against the risk which is created on flight, landing and the time of take off an aircraft. Aviation insurance acquires the risk of passenger, cargo hull also. Despite the

heavy charges all sends considerable quantities of Goods and there is a demand for insurance, more particularly because such goods are usually of small bulk and high value. Thus aviation insurance is essential and important in aviation field. Aviation insurance covers the Hull insurance, Aircraft liability insurance and medical payment too.

Automobile Insurance Policy

It is related to the risk of vehicles. It provides certainly against the risk of accident. It is directly related with providing the insurance against the perils or loss accruing with respect to the vehicle and with providing financial assistance to the insured to result the third party liability accruing due to the damage caused by the vehicle. The automobile insurance covers the full comprehensive policy and third party liability insurance too.

Engineering Insurance Policy

Engineering insurance policy is directly related with against the risk of engineering tools and technique. It is related with the risk transfers arrangement against perils, hazards or risk arising within manufacturing organization or within technical job sectors. A manufacturer has risk of break down his/her plant and may produce disqualify goods. However an engineering insurance provides the protection against that situation. Usually under this policy there will be basic insurance contracts.

Boiler Insurance Policy

Usually, all the big and small industry has installed the boiler machine to produce steam power. Where the boilers are used, there will always be the possibilities of explosion or breakdown. Therefore, the boiler owner wants to get protected of such types of risk. However, engineering insurance protects against the risk occurring due to the explosion or damage of industrial boiler. If the heating boiler

is explosion, in such explosion the person may get injured or the property may be destroyed. At that condition boiler insurance provides the protection against the all risks of boiler.

Medical Aid Scheme Insurance Policy

Under this policy insurer provides the financial support against the health problem to the insured. In this policy, insurer will be responsible to pay the all medical expenses for the insured if the insured needs medical treatment unexpectedly within the written period.

Other Insurance

The types of insurance can be defined by different ways. Besides above insurance types, there are also other types of insurance, for example; household insurance, money in transit insurance, burglary insurance, machinery all insurer risk insurance, contractors all risk insurance, workmen's compensation and employers liability insurance etc.

Miscellaneous Insurance Policy

“A number of coverage's written by casualty insurer's are available that can not be classified neatly as liability, auto or crime insurance but nevertheless are important to those with the exposure that these forms are designed to protect. They are discussed under the innocuous heading of miscellaneous coverage and are written by property and liability insurance”(Mehr et al, 1974: 344). Miscellaneous insurance policy covers the vague of insurance policy. However there are the practically important policies by the insurers.

2.1.5 Characteristics of Insurance

Insurance has its own specialties and characteristics. Some of its characteristics are as follows:-

i. Pooling of Losses

Pooling or sharing of losses is the heart of insurance. Pooling is the spreading of loss incurred by the few over the entire group so that in the process average loss is substituted for actual loss (Joshi, 2001: 221).

Insurance is a device through which the risk or loss arising out of an event to an individual or the household is shared by all those insured in an insurance company in the form of premium. Examples of event include fire in fire insurance, death of the bread-earner in life insurance, accident in motor insurance and so on. In addition, pooling involves the groupings of a large number of exposure units so that the law of large number can operate to provide substantially accurate predictions of future losses. Pooling thus implies (a) the sharing of losses by the entire group and (b) prediction of future losses with some accuracy based on the law of large number.

ii. Payment of Fortuitous Losses

Insurance is a payment of fortuitous losses. Loss that is unforeseen and unexpected and occurs as a result of chance is known as fortuitous loss. It implies that the loss must be accidental. For example, if a person falls from the roof and his leg is broken the loss would be fortuitous. Insurance companies do not cover intentional losses.

iii. Risk Transfer

An insurance plan always involves risk transfer. Risk transfer means that a pure risk is transferred from the insured to the insurer. The insurer is in a stronger financial position to pay the loss than the insured. Risks that are transferred to the

insurers include the risk of premature death, poor health, disability, theft of property and liability lawsuits.

iv. Indemnification

Indemnification of losses is another characteristic of insurance. "Indemnification means the insured is restored to his approximate financial position prior to the occurrence of loss." For example, if the house of a person is burn the insurer until indemnify him, or restore him to his previous position. Likewise, if a person is used for harming other by negligent driving a car, the insurer will pay those sums that he is legally obliged to pay.

v. Co-operative Device

Insurance is a co-operative device in the sense that it involves the cooperation of large number of people, and there is no compulsion on the part of the people to join the insurance program. They agree to share the financial loss resulting from an insured risk. An insurer might not be able to compensate all losses only from his capital. However by insuring many people he is able to compensate all losses. People are brought together in an insurance company either voluntarily or through the agents.

vi. Payment of Large Number of People

If certain contingency to the insured occurs payment is made in fire insurance fire is the contingency and in marine insurance marine peril is the contingency. Fire or marine peril may or may not occur. So, payment is made to the insured only if the contingency occurs. In the life insurance the contingency the death or the expiry of the term occurs with certainty, so payment is not certain due to uncertainty of a particular contingency within a specified period. For example is term insurance payment is made only if the insured is dead within a specified period that is within

one or two years. On the other hand in pure endowment payment is made only at the survival of the insured at the expiry of the period.

vii. Involvement of large Number of People

As started earlier large number of people or property should be insured in order to make insurance cheaper. Higher the number of people lesser will be the cost of insurance. In other words the insurance premium will be lower. It enables an insurance company to spread the loss among large number of people.

1.1 2.1.6 Principles of Insurance

Commercially insurable risks typically share seven common characteristics (Mehr and Camack, 1976: 34 – 37).

1. A Large Number of Homogeneous Exposure Units

The vast majority of insurance policies are provided for individual members of very large classes. The existence of a large number of homogeneous exposure units allows insurers to benefit from the so-called “law of large numbers,” which in effect states that as the number of exposure units increases, the actual results are increasingly likely to become close to expected results. There are exceptions to this criterion. Lloyd's of London is famous for insuring the life or health of actors, actresses and sports figures. Satellite Launch insurance covers events that are infrequent. Large commercial property policies may insure exceptional properties for which there are no ‘homogeneous’ exposure units. Despite failing on this criterion, many exposures like these are generally considered to be insurable.

2. Definite Loss

The event that gives rise to the loss that is subject to insurance should, at least in principle, take place at a known time, in a known place, and from a known cause. The classic example is death of an insured person on a life insurance policy. Occupational disease, for instance, may involve prolonged exposure to injurious

conditions where no specific time, place or cause is identifiable. Ideally, the time, place and cause of a loss should be clear enough that a reasonable person, with sufficient information, could objectively verify all three elements.

3. Accidental Loss

The event that constitutes the trigger of a claim should be fortuitous, or at least outside the control of the beneficiary of the insurance. The loss should be ‘pure,’ in the sense that it results from an event for which there is only the opportunity for cost. Events that contain speculative elements, such as ordinary business risks, are generally not considered insurable.

4. Large Loss

The size of the loss must be meaningful from the perspective of the insured. Insurance premiums need to cover both the expected cost of losses, plus the cost of issuing and administering the policy, adjusting losses, and supplying the capital needed to reasonably assure that the insurer will be able to pay claims. For small losses these latter costs may be several times the size of the expected cost of losses. There is little point in paying such costs unless the protection offered has real value to a buyer.

5. Affordable Premium

If the likelihood of an insured event is so high, or the cost of the event so large, that the resulting premium is large relative to the amount of protection offered, it is not likely that anyone will buy insurance, even if on offer. Further, as the accounting profession formally recognizes in financial accounting standards, the premium cannot be so large that there is not a reasonable chance of a significant loss to the insurer. If there is no such chance of loss, the transaction may have the form of insurance, but not the substance (Rubin, 2000: 113).

Calculable Loss

There are two elements that must be at least estimable, if not formally calculable: the probability of loss, and the attendant cost. Probability of loss is generally an empirical exercise, while cost has more to do with the ability of a reasonable person in possession of a copy of the insurance policy and a proof of loss associated with a claim presented under that policy to make a reasonably definite and objective evaluation of the amount of the loss recoverable as a result of the claim.

6. Limited risk of Catastrophically Large Losses

The essential risk is often aggregation. If the same event can cause losses to numerous policyholders of the same insurer, the ability of that insurer to issue policies becomes constrained, not by factors surrounding the individual characteristics of a given policyholder, but by the factors surrounding the sum of all policyholders so exposed. Typically, insurers prefer to limit their exposure to a loss from a single event to some small portion of their capital base, on the order of 5 percent. Where the loss can be aggregated, or an individual policy could produce exceptionally large claims, the capital constraint will restrict an insurer's appetite for additional policyholders. The classic example is earthquake insurance, where the ability of an underwriter to issue a new policy depends on the number and size of the policies that it has already underwritten. Wind insurance in hurricane zones, particularly along coast lines, is another example of this phenomenon. In extreme cases, the aggregation can affect the entire industry, since the combined capital of insurers and reinsurers can be small compared to the needs of potential policyholders in areas exposed to aggregation risk. In commercial fire insurance it is possible to find single properties whose total exposed value is well in excess of any individual insurer's capital constraint. Such properties are generally shared among several insurers, or are insured by a single insurer who syndicates the risk into the reinsurance.

2.1.7 Function of Insurance

Basically there are three types of functions of insurance which are as follows:

a. Primary Function

The primary function of the insurance is the equitable distribution of the financial losses of 'few' among 'many' because insurance is described as a method of financial losses of a few from a common fund formed out of contribution of many who are exposed to the same loss. Therefore it is a system of spreading the losses of an individual over a group of individuals.

b. Subsidiary Function

The subsidiary function means to provide the financial assistance as well as stability to the economy. A person whether he is in business or a profession or is in service, under an insurance plan, he can achieve monetary protection in the event of death or disablement on his life and taking financial assistance in the event of loss to his property by means of accident. Thus insurance provides financial stability to trade, industry and the community.

c. Indirect Function

This function is the best medium of mobilizing internet resource and capital for the development of a country. Insurance companies collect the amount as a premium from the public. A part from this fund is utilized for current assets and current liabilities and the balance is set aside as reserve which is invested in government securities, bank fixed deposits and equities of other organizations.

2.1.8 Importance of Insurance

The main objective of insurance is to avoid the losses from uncertainty. It not only reduces risk but also helps in the economic system as a whole. The importance of insurance is summarized below:

a. Means of Security and Safety

Insurance is a mean of spreading risk among people. It provides safety and security to the insured against unfavorable events.

b. Motivates Saving and Means of Investment

Insured must pay the premium regularly and compulsory. Insured must save the amount for premium and there accumulated premiums are returned to the insured person with bonus at the expiry of policy or to the legal heirs of the insured is case insured dies. So, insurance is a saving and means of investment.

c. Importation of Eliminates Dependency

Insurance is a means to eliminate dependency at the time of retirement. It is equally helpful for social functions. Like marriage of children, education of children etc.

d. Assist in the Continuation of Business

Business firm may discontinue its business due to various reasons. This discontinuation of business may be avoided by insuring the different aspect of business.

e. Assist in the Reduction of Business Losses

Business firm may encounter with various risks (events) like fire, burglary, flood, earthquake etc. These unfavorable events may turn a profitable business in loss. Insurance plays a vital role in avoiding such incidents or losses by insuring business.

f. Expansion of Business

To expand business, additional found is needed. Additional fund can be generated by using insurance policy life insurance policy can be pledged as collateral to obtain loan. So insurance helps in the expansion of business.

g. Privileges to the Employees

Employees want economic security and safety future. Some employees are involved in risky jobs. Insurance is the best instrument for extending privileges to employees in different forms like life insurance, medical insurance, accidental insurance etc. So, insurance is important to provide privileges to company employees.

h. Assist to Reduce Inflation

Insurance companies are also financial institutions. So, they influence financial system. So, insurance companies can influence inflation of country in various ways. It influences the monetary transaction by absorbing the monetary circulation by means of premiums. Also helps to invest its found in productive sectors narrowing down the inflationary gap in the country.

2.1.9 Problems of Insurance in Nepal

1. Limited Market

The few number of industries, companies and slow growth of economy and industries are the basic responsible factors for the limited market of insurance business. So, there is limited market of insurance business.

2. Lack of Insurance Awareness

Majority of Nepalese people are illiterate and economically backward. Due to this there is lack of awareness of insurance in general public. So the insurance sectors are found to be limited in urban area. This is another problem in insurance (Vaidya, 2001:181).

3. Lack of Expertise

The insurance business depends upon the availability of expertise in the related field. The required manpower for the expansion of insurance business in Nepal is

not sufficient. Manpower like underwriter, agent and surveyors are not experience as per the demand of market.

4. Lack of Compulsory Insurance

In Nepal insurance is not compulsory as in other development countries.

5. Low Purchasing Power

Nepal is poor country. The per capita income of people is low. So, they don't have enough money to pay insurance premium.

6. Low Return

The insurance business has low return than other business. So businessmen are not attracted toward this sector.

7. Lack of Re-Insurance Company

The basic infrastructure for the development of insurance business is the existence of re-insurance company. The re-insurance company is not available in Nepal. Thus Nepalese insurance companies must depend on foreign company for this.

8. Complicated Claim procedure and Slow Settlement

The claim procedure is generally complicated and slows the insured gets compensation offer long waiting and complicated procedure.

2.1.10. Legislation and Regulation Relating to Insurance Activities in Nepal

It is well known fact that any business needs law. Every business is directed and controlled by the legislation and regulation. Similarly, the insurance too is governed by Insurance Act 2049(1992) and Rules 2049(1992). The Rastriya Beema Sansthan and other more than 17 insurance companies from the private sector are running now the Rastriya Beema Sansthan is governed by Rastriya

Beema Sansthan Act 2025 and Insurance Act 2049 and Rules 2049 and the insurance companies opened from the private sector are run by the Company Act 2053, Contract Act 2056 and Insurance Act 2049 and the rules 2049. In addition to it the insurance companies should follow and obey the policy, instruction and the circulars issued by the insurance Board from time to time. On the other hand they had to move according to the policy and directions issued by the office of the company register. All acts and rules help and control in every activities of insurance business (Bhandari, 2004: 21).

Following are the legislation and regulation related with the insurance activities in Nepal:

1. Rastriya Beema Sansthan Act 2025(1968)
2. Insurance act 2049 (with amendment)
3. Insurance Rules 2049(with amendment)
4. Company Act 2053
5. Contract Act 2056

The main feature of the insurance Act and Rules of Nepal are a follows:

a. Provision of the Insurance Board

Insurance Act 2049 has made provision of the formulation of insurance Board with a view to manage regulate develop and control insurance business. It was established in 2025 B.S. as made provision is Beema Act 2025 within an objective to regulated and manage insurance business. A person appointed by the Nepal Government is the chairman and Representative from Minister of law justice and parliamentary affairs, finance, A person nominated by Nepal government from among persons specializing in insurance business and from among insures are the member of insurance Board . The main function and right of this Board are as follows:

- i. Regulation and supervision of insurance business.

- ii. To provide advice to the government in policy formulation.
- iii. To make policy and determine priority area of investment in insurance sector in order to invest the funds collected from insurance.
- iv. To make registration and issue license renewal and cancel the registration of insurer, insurance agent surveyor and broker.
- v. To make necessary criteria in order to safeguard the interest of the insured.
- vi. To mediate in the dispute between insurer and insured.
- vii. To provide necessary direction to insurance companies.
- viii. To undertake other functions relating to insurance business.

b. Provision of the Payment of the Insurance Claim after the Cancellation of the Insurer

In case any insurer is dissolved as a result of the cancellation of its registration under section 13, the concerned insurer must refund the amounts received by it in the course of insurance to the policy-holding individuals and institution or the Board within the time and procedure prescribed by the board. In the case of life insurance business it shall refund the principle amount along with a bonus as prescribed by the Board, while in the case of non-life insurance business it shall refund the principle amount prescribed by the Board on a proportionate basis.

c. Provision to Pay the Premium before the Risk Takes

Until the amount for the charge of the insurance, while operating the insurance business any insurer should not accept the risk. Only after the amount of premium received from the insured an insurer became liable for that risk. But if any reason, getting practical difficulty to pay the whole sole amount fixing the period to pay the rest of the amount there is legal provision not the restriction for issuing the insurance policy with the guarantee of the Nepal government or the bank.

d. The Provision to Get the Insured Amount by the Designee

Under the section 38(1) of the insurance Act 2049, in case any life insurance policyholder dies, before the expiry of the term of his policy the amount mentioned in such policy shall be paid to the person designated by him therein. In case he has not designated any person or in case the designee has already died payment shall be made to any of his surviving related.

e. Provision for the Classification of the Insurance

Under subject to the act and rules, insurance business to be under taken by an insurer shall be classified into the following categories:

- i. Life insurance business
- ii. General insurance business
- iii. Re-insurance business

g. Legal Provision for the Appeal

According to the section 37 of the insurance Act 2049, there is a legal provision that if a person or an organized institution is not satisfied with the decision of the insurance Board, the related person a institution can appeal to the related court within 35 days of the decision made.

h. Provision made for the Appointment of Liquidator

Under the section 18 of the insurance Act 2049, in case an insurer is dissolved as a result of the cancellation of its registration under section 13, Nepal government may appoint a liquidator. The functions duties and powers of the liquidator appointed shall be equivalent to these of a government liquidator under the company Act.

2.1.11. Investment Pattern

Investment

An investment is the sacrifice of current rupees for future rupees, the sacrifice takes place in current and certain but reward comes later uncertain. In another words investment is the employment of funds with the aim of achieving additional income or growth in value. It involves the commitment of resources that have been saved or put away from the current consumption with the hope that some benefit will receive in future. Investment involves long term commitment and waiting for reward. Three attributes are generally involved in investment are time, risk and return.

Generally investment means to flow cash in different sectors as profit motive. Investment in its broadest sense means the sacrifice of certain present value for future value. In pure financing sense " the subsequent use of term investment will be in the prevalent financial sense of the placing of money in the hands of other for their use, in return for a proper instruments entitling the holders to fixed income payment or the participation is expected profits" (Dowries and Fuller, 2001: 6).

We are finding various definitions of terms of investment at different points of view. But we need to clear the terms of investment in financial point of view as related to our study. Investment may be defined as the purchase by an individual or institutional investor of a financial or real asset that produces a return proportional to the risk assumed over some future investment period. On the other word all the collective or saving amount invested in financial or real assets for increment of wealth. First condition for investment to individual investor is that one should stop present consumption.

Investment may be classified into two groups.

a. Real Investment:

It involves real assets, i.e. directly involved in production process. It involves some kinds of tangible assets such as land, furniture, machinery, vehicle etc.

b. Financial Investment

In involves financial assets i.e. which are not directly involved in production process. This type of assets is just a promising paper like equity share, preferred stock, bond, debenture etc. so it is just a contract written on piece of paper.

For our purpose, in the study of the financial institution the investment and investment problem remove around the concept of managing the surplus financial assets in such a way, which will lead to the wealth maximization and providing a significant further source of income. Thus, resources in such a way as to make it work for providing benefits to the owners by increasing the total assets, simultaneously providing benefits to the supplier of the funds by letting the third party to use such resources. However, the investment needs be procedural task. It must follow a definite investment process this definitely begins from the formulation of proper investment policy.

Process of Investment

- Set the investment policy
- Perform the security analysis
- Construction of port-folio.
- Revised the port-folio.
- Evaluation of the port-folio performance.

Insurer has responsibility liability to pay certain indemnity and balance fund at a certain specified time is held with the accident or loss. Therefore insurer basic

function is not only to collect premium but also investment of collected fund. The funds are invested to earn at least rate of invest. The needs of investment of funds are given in brief.

- Payment of claims
- To avoid financial deficit
- To collect the funds
- To contribute in national economy

Further to invest any fund requires source of funds. Insurer also invests their fund in different sectors. The funds with the insurers are accumulated from the various sources which are listed below.

- Premium
- Interest
- Capital gain
- Saving in expenses

Though the insurer has advantages of investing above mentioned sources of fund, but they cannot invest the entire collected fund in profitable investment. It is so because of the primary function of the insurer, which is to provide financial assurance against insurable risks and the regulatory provisions governing them. In fact insurer only gets a portion of their inflows as investible fund after arranging for various items. For the purpose of running it is essential for their insured invest the fund. An insurance or insurer must mobilize its collected premium and other funds to profitable secured a profit, secured and can be converted into cash whenever needed.

2.1.12 Principle of Investment

Generally, the investment depends upon principle of investment. All financial institution and intermediaries invest their collected funds under investment principles and policies. However, investment policy reformed and developed from the principle of investment. Therefore so, many determinants of principle of investment directly affect the investment policy.

Generally, policy will be a plan or course of future action that proposed to adopt regarding a particular field of activities all the future strategy and course of action are over mentioned the policy. Therefore policy may act as a guideline in a particular subject for particular organization for our purpose, investment policy will also be the plan or course of future action that is purposed to adopt regarding the investment. The investment policy may be different according to the objective and nature of the organization. But all the investment policies must be balanced as of risk return character and suggested to invest at liquidity, safety and profitable sectors.

Such, Investment policy will be the outcomes of various interrelated consideration, regarding the insurance business also it will be the outcomes of various principles and other affecting matters that need to be followed, because the investment policy is formulated under regarding the principle of investment. "While investment policies needed to be formed the investors need to consider many factors. Usually there are the factors to be considered in investment planning decisions, security of principle, and stability of income and rate of return, marketability and liquidity (Shim and Siegel, 1989: 255-256).

Safety and Security

The safety and security principle is a primary and basic principle of the investment policy. The insurer should never invest its funds in these securities which are

subject to too much depreciation and fluctuations because a little difference may cause great loss. Therefore, insurers perhaps invest their funds in fixed deposits and treasury bills of NRB. The collected premium is a liability for an insurer; therefore they are always conscious on security and safety of the investment. American life insurance association also in forced the principle of safety. "The basic principle for limiting the investment to those with the high margin of safety not only imposed on the companies by the system of state investments laws described presently, it has long been recognized as a paramount consideration by the insurance companies themselves" (LIAA Monograph, 1969: 60). To obtain the security on investment insurer required sound matching in their investment portfolio. To maintain the secure investment holdings the insurer needs to analyze and concentrate on the secured lending. The secured investment provides the good return and liquid cash flow whenever required.

Profitability

Generally, insurance companies or insurer obtain their name and era through paying claim in simple procedure and right time. In order to pay claim and maintain office expenses the fund is required. An insurance company can maximize its value of wealth and collection of fund through maximization of return on their investment. So, they must invest their fund where they can gain maximum profit.

Diversification

An insurer should not lay all of the eggs in the same basket. This saying is very important to the insurer and so insurer should be always careful not to grant investment in only one sector. To minimize the risk on insurer must diversity investment in different sectors.

Diversification of investment helps to sustain loss according to the law of average because if securities of a company deprived there may be appreciation in the securities of other companies. In this way the loss can be recovered and the company may be able to earn more profit. The diversification provides maximum security with high yield and better liquidity provided the diversification is done taking into account of all these factors.

Liquidity

The principle of liquidity is important for the insurance investment. Insurer has no information about when they need to pay the claim of their client. So, any one unseen time there will be the requirement of fund. Thus the insurer has to invest under the principle of liquidity.

Liquidity represents convertibility of investment into cash without undue loss of capital. The insurer needs to maintain working cash and bank balance in order to carry out the normal transaction of receiving payments and making disbursements. Further they need to finance the unforeseen claims occurring in the form of matured contracts. Therefore insurance needs to maintain the liquidity at their investment. The principle of liquidity is against the principle of profitability, because the idle cash will earn nothing and invested cash will have no liquidity.

Marketability

It is an important principle of investment policy. The principle of marketability suggests the insurer to invest in those sectors where easy possibility of cash convertibility exists. Insurer may not have any information about the requirements of the funds to pay the claim of the insured. So they need to invest in those sectors where marketability principle must match with each other principle as well as with the line of insurance business and the nature of the required fund.

2.1.13 Investment Policy under Different Insurance Industry

Usually, all the insurer follow the main principle of investment under investment policy which is mentioned above the principle of investment is based on nature of business and line of business. An insurer has written the different policy written in different insurance business. Therefore they include the different investment policy to invest collected fund in accordance to the character nature and time period of the policy.

Since life insurance and general insurance differ in their risk assurance character, their claims nature, volume and nature of their policy handling of each type the timing in insurance claims relative to payment of premium etc. hence the insurer obtain different investment policy on their investment of different policy fund.

a. Life Insurance and Investment Policy

Life insurance business is a long period coverage insurance business. An insurer can mobilize the collected premium fund of life insurance in long term. Because they do not require the fund in short term. "An important attribute of the insurance fund is that they are of the long term nature. The claims against them by the policyholders materialize is a fairly regular pattern over time i.e. usually upon the death of the insured or at the maturity of the endowment policy" (Mahat, 1981: 190). Insurer written the life insurance under different policy has perhaps a nature of long period like whole life policy endowment policy etc.

Life insurance is a main source of collection of the funds. It can collect large amount of fund so, insurer needs policy to invest these funds. "The chief objective in the management of the funds of life insurance companies is to have adequate funds with which to meet claims, which includes not only the death, disabilities and annuity payments called polices but also the demand for the cash surrender

value by person canceling policy their policies or for loans secured by the cash surrender value” (Dowries and Fuller, 1950: 229).

This aspect of insurance business desires the investment policy, because the fund of life insurance is liability for an insurer. Therefore insurer has responsibility to invest profitable sector and security also. Thus, "the fundamental purposes of the life insurance investment are: (a) to make possible the fulfillment of contractual obligation to policy holders. (b) To make available life insurance protection at a cost as low as possible. To meet these objectives an investment must give promise of (a) certain return on principle. (b) a stable and reasonable income yield.” (Magee, 1959: 743) To attain the basic objective and strategy the insurer should invest the life insurance fund under investment policy.

b. Non-life Insurance and Investment Policy

Commonly, non-life insurance companies insurer follow the principle of investment an investing the fund. Insurer cannot predict correctly when they required the fund. But if the insured held accident then the insurer is responsible to pay certain indemnity. Therefore, to match the convertibility or liquidity; insurer invests their fund under certain investment policy. Usually to maintain the successful operation of the business and be prompt in claim payment the insurer needs to hold major of their inflows available to pay future losses and expense, "Because accident causalities and disasters are not all that predictable, property and liability insurance companies must have reserve of funds to cover large claims and settlement if end when occur” (Robinson et al, 1968: 87).

To attain the attractively and maintain the good will insurer needs to make balance in their transaction. So, they collect reasonable and premium and pay the written policy. To transact all function of insurance company is they need amount fund. The main sources of collection of funds are premium and return on investment.

Therefore non-life insurance companies or insurer followed all the mentioned above investment principle and policies.

2.1.14. Premium

Premium is the certain amount of payment, which is paid by the insured to the insurer for bearing uncertain risk, peril or hazards. Usually, premium calculated under different method as considering different affected factor. “Premium can be ascertained either by numerical rating system, evaluated each and every item and marks is assigned to them according to their merits and degrees of influencing risk” (Mishra, 1996: 305). Insurer charges the premium differently accordance to the nature of risk. Thus, the judgment and personal evaluation play vital role in rate (premium) making/calculating. Therefore, various factor to influence the risk. The management and ownership are very important factor while risks are evaluated for the purpose of rate making. Generally, the insurer charges higher premium for higher riskier insurance and lower premium for less riskier insurance policy. The premium is always directly affected by the nature of risk expenditure of office, other expense and written time period. But “a strong case exists for reviewing the rates of premium and simultaneously to exercise greater control over expenditure to generate a reasonable surplus in their insurance business.” Generally only premium is one of the main sources of raising fund for insurer. So, insurer should obtain sound management for calculating premium amount and collection process. Different insurance companies or insurer may charge different premium to insured under their objective and goal with accordance to the policies, risk and uncertainty.

Types of Premium

We can find various premiums to paying insurer according to the policy. But the premium is fundamentally of two types; Net Premium and Gross Premium. Net premium is calculated considering mortality and interest rate. Therefore, the rate

of death of person and interest directly affect on the premium amount to calculating under net premium method. Similarly, the assumed interest rates and expenses of organization and the mortality rate directly affected calculation of premium under gross premium method. “The net premium is based on the mortality and interest rates whereas the gross premium depends upon the mortality rate, the assumed interest rate, and the expenses and the bonus loading” (Mishra, 1996: 203).

To make easier calculation of the premium amount, the two premiums are further sub divided into two parts.

- Single Premium
- Level Premium

Single Premium

According to single premium system the amount of premium is not divided into installment. The insured obliges to pay all premium amounts in lump sum basis. It makes difficult to insured because of paying heavy/ large amount in one time. We can further define the single premium. It makes to a system to paying all premium amounts in only one installation. “ net single premium is that premium which is received by the insurer in a lump-sum and is exactly adequate, along with return earned thereon, to pay the amount of claim wherever it arises whether at death or at maturity or even at surrender. It does not provide for expenses of management and for contingencies”.

Level Premium

Life insurance is usually, issued on a level premium basis, which means that the same premium is charged through out the life of the contract. So, the level premium is paid periodically in installment. The level premium may be yearly, half yearly, quarterly and monthly. “The level premium system was once a starting

innovation because it was reasoned that due to the rising probability of death with age, it would be impossible to charge a flat premium that would compensate for the rising mortality costs. The first insurance policies were issued for one year only and were renewable at the end of this year at a higher rate, provided that the insured was still in good health. These contracts are still available and are known as yearly renewable policies” (Greene et al, 1995: 243).

Usually, the level premium is suitable for the life insurance policies and for the purpose of limited income able person. So, “the level premium idea is considered one of the most basis advances ever made in the development of life insurance. With this concept, it becomes possible to issue policies for longer and longer period until finally whole life contracts were made a regular part of the business. Actuaries using refined mortality statistics could calculate exactly how much had to be charged during the early years of the contract in order to make up for the rising mortality costs of the later years. Level premium is easily converted by the net single premium. Hence, the single premium of a given policy can be easily converted into level premium by establishing ration between net level premium and net single premium. Because the net single premium is the present value of all claims and the present value of all net level premium is also equal to the total of present values of all claims. It means the present value of all net level premiums is equal to the net single premium. Insurer can calculate the level premium by establishing ration between net level premium and net single premium.

2.2 Review of Previous Study

Various experts, authorities and MBS, MBA students have conducted a number of researches relating the insurance business. Among them only few are related with the investment aspect of the insurer and insurer business. Although there are many research conducted in insurance field we can find only limited researches done in

the aspect of premium collection and investment pattern of Life Insurance Company.

Adhikari (2000), conducted research study on "*Insurance Industry in Nepal: A Case Study in Investment Policy and Practice with the Objectives to Examine the Trend and Pattern of Investment towards Different Portfolios*". Further he had covered investment policy of both life and non-life insurance business in his study. For the first objective of his study he concludes in life insurance business as;

- Regarding the life insurance industry, major portion of investment was incepted within the head 'government securities' and 'bank fixed deposits' falling into the classification 'compulsory' only a very smaller portion of investment was invested in the sectors falling into the classification 'optional'. However, a smaller portion was also diverted towards the head 'policy loan'. From past pattern of investment it can be concluded that the life insurers were unable to diversify the field of investment in term of portfolio choice and proportionate distribution among portfolios. It can also be concluded that the principle of liquidity, marketability and security of principle and significant force upon the life insurers rather than the principle of maximized yield, diversification and other regulatory aspect.
- In the same way for non-life insurance business he concludes that the Nepalese non-life insurers were not following generally accepted principles of investment and the investment component. For non-life insurer the principle of liquidity and marketability counts more than the yield rate because their requirement of cash will be very unpredictable. He has concluded that the non-life insurer had tried to diversify the field of investment in term of portfolio choice and proportionate distribution among portfolios. However they were bound either due to the internal reason or regulatory limits enforced upon them or due to the limitation of money / capital market condition. He also concludes

that all the principle mentioned earlier along with other affecting factor's had significant factors upon them. They were bit aware of the diversification. The diversification by the proportion of invested amount had been achieved but the diversification by the diverse portfolio holding had not been achieved.

Bhattarai (1993), made the study on "*Insurance Board in Nepal: Its Effectiveness and Controlling Insurance Companies*". This study was focused on how to control the insurance companies by government on itself. He defined the measures of regulating and controlling system. It has a descriptive analysis. The conclusion drawn by him in his studies was: the majority of the respondent fell under the group of 41 years and above. Most of them were married and majority of them had a master's degree. The respondent of the insurance board was experienced in other field than insurance. It might be due to the part time nature responsibility in the board.

He had taken specific activities of the insurance companies into consideration for respondent's board member and the insurers identified legal reserve regulation as effective one than that of capitalization. He had found the tariff rate too high. He pointed that the present regulation of the board was less effective in safeguarding the interest of the insuring. He had found that the policies from approval were time consuming and delay that create unhealthy competition.

He had recommended modifying the existing tax rate in his study. "The board should strictly check, if the company really completed and set a side funds for their reserve to overcome the problem on legal reserve".

Raut (1996), carried out the study on "*Financial Performance of National Life and General Insurance Company Limited*". He has analyzed the various financial rations of it. He had analyzed liquidity ration, premium turnover ration, return on

net worth, return on shareholder's equity, earning per share, dividend per share, investment to total assets ratio, fixed assets to total ratio. He had also analyzed financial performance of different insurance business. This study covers for the periods of 5 years from 1988/89 to 1992/93 and only deal with national life & general insurance company limited, there is no comparison between other insurance companies and industry. This study emphasis with financial tools, mainly with ratios and ignores the importance of statistical tools.

Raut found the following major findings from the study:

- The companies' outstanding premium in the five years periods jumped from Rs 5.22 million in 1988/89 to Rs 15.68 million in 1992/93.
- Regarding liquidity management, the NLG is not in sound position. The current ratio comes to a highest of 0.3 in 1988/89 to a lowest of 0.17 in 1992/93 taking derivation from average standard i.e. 0.89 times.
- The return on net worth of NLG is satisfactory because return on net worth is in increasing trend. The return on net-worth increased from 8.35% in 1988/89 to 30.29 in 1992/93.
- Return on shareholders equity is also in better position. Because it shows improving trend. In the base year 1988/89 it was 9.19% and it was 55.32% in 1992/93.
- The trends of earning per share are fluctuating. It deviates from minimum level of Rs 7.72 per share in 1988/89 to maximum of Rs 55.28 per share in 1992/93, it proves that there is no control return on the investment to shareholders during the study periods.
- The NLG declares the dividend in increasing trend.
- Investment of NLG is not less than 50% of the total assets in every year of the study periods.

- Premium earning of NLG in insurance business has increased day by day, which suggests successfulness of insurance business in Nepal.

Gellal (1998), made the study entitles "*A Comparative Financial Analysis of Nepal Insurance Company Limited and National Life and General Insurance Company Limited*". In his study analyzed only two insurance company's financial performance among various insurance companies. This study was descriptive and analytical too. He analyzes the financial position, liquidity and profitability condition and market situation of NIC and NLGI in his study. After the detailed study and analysis he concludes that:-

- Premium collection of both life and non-life insurance shows growing trend of this business in the recent year of the study period. But net claim paid and investment by insurance company is not increased as increase in premium collection during the study period.
- The net profit percentage of NIC found better then NLGI but the liquidity position of both companies is found better.
- Current assets turnover ratio of NLGI followed decreasing trend, which is the indication that the efficiency of utilizing current assets deteriorated over the period due to negligence of management in utilizing current assets. The average turnover on current assets of NIC was 24paise where as NLGI return was 15paise which is not satisfactory. Comparatively NIC's current assets turnover was found better then NLGI but the dividend per share of NLGI is higher then NIC during the study period.
- Change in insurance premium collection of NIC ranged about 18.04% to 34.64% where as the NLGI premium collection ranged about 17.10% to 61.97%. So high fluctuation is found in NLGI.
- After the study and analysis Mr. Gellal recommends that;

- Insurance premium collected should be invested in different sector other than HMG bond in order to enhance the life standard of people there by increasing the insurance premium.
- The necessity of training to agent is a must before their appointment in order to attract the people.
- NIC is advise to minimize the risk lend by reducing debt participation and increasing equity proportion even though it is risk oriented institution and it is advised to improve it's management in controlling operating expenses.
- At last he advised to all the insurance companies that they should be social responsibility oriented rather than premium oriented in order to develop this business and they should introduce new policies so to make easy for the development of insurance business.

Poudel (1999), has conducted a research on "*Insurance companies in Nepal*". Poudel's study was descriptive and diagnostic one and was intended to cover every policy and practical issues relating the insurance business. Mr. Poudel had attempted to analyze the status of the insurances companies. For this purpose he had set the objectives like assessing the status of the industry, analyzing policy issues examining the liability structure and investment portfolio, and to review major policy issues of the insurers.

To attain the objectives he had used descriptive research design based upon the secondary data only. He had used qualitative rather that quantitative analysis. Through out the study, the research was concentrated on analyzing the regulatory provisions and its impact on the practice among the insurers. In the study, Poudel had analyzed every provisions relating the formation, working and governance if the insurance companies. As a part of his study he had also provided insight upon the investment of the insurers and the provisions governing the investment function. His all over findings and conclusion was that the basic laws and by law

are/were not sufficient. The excess power on the hand of the insurance committee was advantageous to some extent but it was much costly in many cases. His conclusion relating the investment was that the regulatory provisions were not hospitable rather they were much restricting the classification between the portfolios on “Compulsory” and “ Optional” caused hindrance to the insurers in their investment management process, but the limited number of allowed portfolios as “Optional Sectors” causes more hardness. Further suggested that to divert the insurers from investing in the traditional fields of investment a conducive investment environment need to be created and it can be formed through adding more investment alternatives in “Optional” fields rather than increasing its share.

Hence, this study was descriptive rather than analytical. The qualitative analysis might not is enough to present the exact picture of the status of the insurance companies. Further, the research was revolved around the policy issues rather than practical uses. The analysis of investment aspect among the insurers was a part of his researcher has given less emphasis to the investment aspect among the insurance companies. Further, the investment return and investment performance was also ignored in the study. Further the views and perception of practicing manager regarding the investment and its performance had also been ignored in his study.

Pokhrel (1983), carried out the study on “*Investment Pattern and Policy of RBB*”. She had concluded that commercial bank plays a vital role in accelerating the growth in a developing country like ours. It mobilize the people saving divert them in a productive channel through investment. The investment policy of these banks has to be considered with respect, otherwise bank may not accelerate the economic growth rate of the country. But the investment policy of commercial bank is affected by central banking policy. Besides, it should be able to divert the credit from less important sector to more important sector in the economy.

She had also concluded that large part of the country had no banking facility. So in these parts bank couldn't make investment. Large part of the investment was in unproductive sector. So, productive sector lacked investment, which is also seen now days. Banks were scared of making investment due to lack of securities and people were not able to obtain loan due to defective investment policy.

Shrestha (2002), made study on "*Premium collection and investment position of national life and general insurance company limited.*" Mr. Shailendra has been focus on evaluating the premium collection and investment position of one of the leading private insurance company, NLGI. Based on analysis some of the major findings are as follows:

- From the analysis found that the ratios were rising and falling trend. During the study of seven years period, highest ratio was in F.Y. 1996/97 and least was in 1999/00, the average premium collection as first life was 25.43%. There was inconsistency in first premium collection.
- The average contribution of renewal life premium and general premium collection towards total life premium collection revealed the inconsistency in it.
- There was diversification in fire premium collection.
- Marine premium contributed only average of 2.29% to total general premium collection and it was highly diversified.
- The misc. premium contributed 68.86% on an average to total general premium collection and there was consistency on it.
- Life premium collection covered 39.16% on an average to total premium collection by the company. There was highly diversification on it.
- The average of 21.86% portion of life investment went to government saving bonds but there was inconsistency on it.

- The highest average of 76.99% of life investment went to bank fixed deposits, there was inconsistency on it.
- The average of only 1.15% of life investment went to policy loans. But there was also highly inconsistency on it.
- The analysis revealed that the life investment was in increasing trend. It covered majority portion of total investment made by NLGI in 1995/96. In 2000/01, it covered 82.40% of total investment.
- The analysis shows that life investment was in increasing trend to total life premium collection. The highest ration was 483.86% and lowest was 278.87%.
- From the analysis, it is clear that least portion of total life premium collection went to compensation. The ratios were fluctuating each year. It ranged 1.16% to 3.34%.
- There was highly fluctuation of general claims paid to total general premium collection.
- The analysis showed that there was highly variation of return of finance fixed deposits of the company. The return ranged 5.33% to 13.84%.
- There was also highly variation in the return of corporate securities. The highest return of it was 13.94% whereas the lowest return was only 0.49%.
- From the analysis, the research found that there was decreasing trend exist in interest earned to total investment. The highest return was 7.28% whereas the lowest return was only 4.28%.

Thapa (2002), carried out the study on “*A Comparative Study on Premium Collection and Investment Pattern.*” Thapa’s study was focused on investment pattern and composition and premium collection and composition. It will be clear that the Nepalese insurance industry were not following generally accepted principles of investment and the investment components. Likewise, they have not

similarity in premium chargeable rate and collection rate too, under different policies, since establishment to till now. The main findings, which are conclude from the analysis as follows:

- The premium collection rate of Nepalese insurance industry has been fluctuating trend under all respective policy in each year and differentiation in investment amount with respective investment sector (optional and compulsory). But almost of the insurer invest their major portion of fund in bank's fixed deposits and the insured chargeable rate of premium is based on Beema Samiti's Regulation.
- The return on premium and interest earn to total premium ratio seems to the decreasing trend, however the claim paid ration and premium collection ratio of insurance industry are increasing trend in study period.
- The coefficient of correlation between premium and investment of Nepalese insurance industry has high degree of positive correlation with significant relationship.
- The analysis of correlation between premium collection and claim paid of sampled insurer and industry has positive relationship.
- The trend analysis on aggregate premium collection and investment shows that there is increasing trend in premium collection and investment amount but has fluctuating trend in respective policy.
- All the insurance industry prefers the portfolio to investment a fund and they accept its essence in investment.

2.3 Research Gap

Research work conducted prior to this work, till the study date, couldn't considers all the life insurance companies of Nepal at once for study on premium collection and investment pattern. Here, in this study, the secondary data of life insurance companies from the fiscal year 2058/59 to 2062/63 B.S. are used for analysis. In the context of Nepal, the study may be first research study, in the study on

premium collection and investment pattern of total life insurance companies at once. The primary aim of this research work is to study premium collection and investment pattern of all life insurance companies individually and also make a comparison between each other. This study used F-test (ANOVA), for significant results from the analysis. Other computer software program SPSS is also used. Latest journals, books, news and views, websites views, etc are considered in this study for better result from the analysis. This research study also revealed the actual scenario and status of the insurance companies in the context of Nepalese financial market.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

“Research is the process of systematic and in-depth study or search for any particular topic, subject area of investigation, backed by collection, compilation, presentation and interpretation of relevant details or data. It is a careful search or inquiry into any subject or subject matter, which is an endeavor to discover or find out valuable facts which would be useful for further application or utilization” (Michael, 1983: 2).

The research methodology describes that methods and process applied in the entire aspect of study. Research methodology is a way for systematically solving the research problem. In other words, research methodology indicates the methods and processes applied in the entire aspects of the study. "Research methodology refers to the various sequential steps (Along with the rationale of each such step) to be adopted by a researcher in studying a problem with certain object(s) in view". (Kothari: 1989). So it is the method step and guidelines, which are to be followed in analysis and it is way presenting the collected data with meaningful analysis. The basic objective of this study is to trace out “thesis topic”. To achieve stated objectives, the study follows the research methodology described in this chapter.

3.3 Research Design

“Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research question and to control variances.” (Wolff and Pant: 2002). The research design is simply the framework for a study that helps the analysis of data related to study topic. “A research design is the arrangement of conditions for collection and analysis of data, in a manner that aims to combine

relevance to the research purpose with economy in procedure.” (Kothari: 1992). Research design is a controlling media for the collection of data and it helps to collect the accurate information, which is related to premium collection and investment policies of life insurance companies. For the purpose of analysis, the latest available annual reports and financial statement of life insurance companies are collected.

This study will be primarily based on secondary data and descriptive, analytical as well as quantitative approach is developed to examine the issues. The aim of study is to evaluate past performance and formalize the desired investment policies for better portfolio formation and attaining better return on the portfolio composition of different life insurance companies. Different statistical model will be applied to interpret the data and come into conclusion.

3.3 Sources of Data and Information

The research study will be based on secondary data. The secondary sources of data are those, which are publicly available in before hand. The required secondary data are collected from Insurance Board (Beema Samiti), Nepal Stock Exchange and Different Life Insurance Companies. Some other data are collected from the central Bureau of Statistics and other concern publication. And some relevant data are also collected from different websites. For the purpose of analysis the data of at least four to five years recent data will be taken as sample.

For the fulfillment of above mentioned objective a definite series of analysis is introduced. The research is based upon the description of the secondary data for historical performance assessment and the future prediction of planning and upcoming policy and implementation among the insurers. Hence the secondary data are used for the analysis and drawing a valid conclusion.

Secondary Data and its Source

This research is basically based upon secondary data, so the secondary data for the purpose of the study is collected through various published and unpublished documentary type sources.

3.7 Population and Sample

In Nepal 17 insurance companies are operating their business. Among them 3 are operating Life insurance business, 2 are involved in both (Life and Non-Life) Business and 12 companies are operating General Insurance Business (Non-Life). As per Beema Samiti, among nine life insurance companies including Rastriya Beema Sansthan, the newly established life insurance companies are Asian, Surya, Gurans and Prime Life Insurance Companies which are presently operating in the context of Nepalese financial market.

Among them five established Life Insurance companies are selected for research purpose. They are Rastriya Beema Sansthan, National Life Insurance Company Limited, Nepal Life Insurance Company Limited, Life Insurance Corporation (Nepal) Limited and American Life Insurance company limited.

3.8 Data Analysis Tools

Further arising the aforementioned objectives following tools and techniques are used in this study, which are applicable in analysis phase.

a. Financial Analysis Tools

Generally the financial analysis tools are used for the purpose of the assessment of the financial position to a particular organization. Financial tools are those which are used for the analysis and interpretation of financial data. These tools can be used to get the precise knowledge of a business which in turn, are fruitful in exploring the strengths and weakness of the financial policies and strategies. There

are various tools in financial sector but for the purpose of this study and in accordance to the studies objectives, ratio analysis was performed in this study. Ratio analysis certainly showed the position of premium collection investment and return and their contribution on overall performance.

Ratio Analysis

For proper financial analysis of data, ratio analysis is the best tool. It is a very simple analyzing tool under which ratios are taken to express the relation between two or more data. Simply relation between two figures is known as ratio. “The relationship between two accounting figures expressed mathematically is known as financial ratio” (Pandey, 1991: 110). In accounting “ Ratio Analysis is defined as the relationship between two accounting figures expressed mathematically” (Pandey, 1991: 120).

Under ratio analysis following ratio related to premium collection and investment position are analyzed.

- First Life Premium Collection to Total Life Premium Collection:

$$\frac{\text{First Life Premium Collection}}{\text{Total Life Premium Collection}}$$

- Renewal life premium collection to Total life premium collection:

$$\frac{\text{Renewal Life Premium Collection}}{\text{Total Life Premium Collection}}$$

- Life premium collection to Total premium collection:

$$\frac{\text{Life Premium Collection}}{\text{Total Premium Collection}}$$

- Investment on Government Saving Bonds to Total Life Investment:

$$\frac{\text{Investment on Government Saving Bonds}}{\text{Total life Investment}}$$

- Investment on Bank Fixed Deposit to Total Life Investment:

$$\frac{\text{Investment on Bank Fixed Deposits}}{\text{Total Life Investment}}$$

- Investment on Policy Loans to Total Life Investment:

$$\frac{\text{Investment on Policy Loans}}{\text{Total Life Investment}}$$

- Investment on Finance Company Fixed deposit to Total Life Investment:

$$\frac{\text{Investment on Finance Company Fixed Deposits}}{\text{Total Life Investment}}$$

- Total Investment to Total Premium Collection:

$$\frac{\text{Total Investment}}{\text{Total Premium Collection}}$$

- Return on Investment

$$\frac{\text{Net Income}}{\text{Total Investment}}$$

- Claim Paid to Total Premium Collection:

$$\frac{\text{Claim Paid Collection}}{\text{Total Premium}}$$

- Interest Earned to Total Premium Collection

$$\frac{\text{Interest}}{\text{Total Premium Collection}}$$

b. Statistical Analysis Tools

Statistical tools are used for attaining accuracy on analysis and study. Various statistical mathematics are studied which are related to decision making for

premium collection and investment pattern under statistical analysis, mean, standard deviation, coefficient correlation, trend analysis, coefficient of variation and F-test are performed.

Mean: The simple arithmetic mean is the sum of total values to the number of values in the sample, thus

$$\text{Mean} = \frac{\text{Sum of Total Value}}{\text{Number of Values}}$$

$$\bar{X} = \frac{\Sigma X}{N}$$

Standard Deviation (S.D.): The Standard deviation shows the deviation of actual value with average mean value of the variable. A small standard deviation means high degree of uniformity of observation as well as homogeneity of a series.

Coefficient of Correlation (r): Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to other variables. Correlation is an analysis of the covariance between two or more variable and correlation analysis deals to determine the degree of relationship between two or more variables. It refers the closeness of relationship between two or more variables. Among the various method of finding out co-efficient of correlation, Karl person's

(Product moment) method was applied in this study.

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

Probable error of correlation was calculated by the following

Formula:

$$PE(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Coefficient of Determination (R^2): In statistics, the coefficient of determination, R^2 is used in the context of statistical models whose main purpose is the prediction of future outcomes on the basis of other related information. It is the proportion of variability in a data set that is accounted for by the statistical model. It provides a measure of how well future outcomes are likely to be predicted by the model.

There are several different definitions of R^2 which are only sometimes equivalent. One class of such cases includes that of linear regression. In this case, R^2 is simply the square of the sample correlation coefficient between the outcomes and their predicted values, or in the case simple linear regression, between the outcome and the values being used for prediction. In such cases, the values vary from 0 to 1. Important cases where the computational definition of R^2 can yield negative values, depending on the definition used, arise where the predictions which are being compared to the corresponding outcome have not derived from a model-fitting procedure using those data.

Trend Analysis: Some statistical tools are used to draw the valid conclusion of the variables. Among them trend analysis is used here to show the basic tendency of investment and premium components.

Coefficient of Variation (C.V.): The coefficient of variance is the relative measure of dispersion, comparable a cross distribution which is defined as the ratio the standard deviation to the means expressed in percent. It is calculated as follows.

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\%$$

F-Test

In this study as a testing of hypothesis F-statistic is done through technique of ANOVA (analysis of variance) in two way classification table, pioneered by Prof. R. A. Fisher. F-test (variance ratio test) is used for equality of population variances and for testing the equality of several population means.

In this study, F-test is used to test

- i. Whether the two independent estimates of population variance are significantly different or not.
- ii. Whether they established the fact that both the samples have come from same universe and have a common variance.
- iii. Whether a given population follows a uniform distribution or how well one population compares with the other in terms of the uniformity or consistency of their distribution.

3.9 Application of Computer Software Programming

In analyzing correlation coefficient and regression the SPSS (Statistical Programme for Social Science), EP Info and Microsoft Excel, a computer application program was used. The results obtained from the program are presented in appendices and relevant information is extracted and fills up the table in respective space during the course of analysis.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This chapter is the heart of this study that is fully related to analysis and interprets various outcomes. Thus in this context, this section analyses the relevant secondary data and information, regarding premium collection and investment pattern of life insurance companies in the context of Nepalese market is presented. This analysis includes financial and statistical indicators in order to achieve the objectives, which are set in introduction chapter. This chapter is concentrated on using the mentioned methodology to meet the objectives of the study and set forth a logic and numerical framework to recommend the probable solution to the problems that are inherent within investment aspect of the insurance industry. While flowing through the data classification and analysis, hierarchal orders, according to the spelled objectives are maintained.

Evaluation of Premium Collection and Composition

Premium is the main source of income for all the insurance companies .The collected premium is invested in different sectors. Investment is done according to the rules and regulation of Insurance Board. Since higher premium tends the higher volume of transaction leading to high income through investment, all the insurer tries to collect higher premium.

In this chapter, quantitative analysis is done relating to the premium collection and its composition. The trend analysis, t-test, mean, standard deviation and coefficient of variation are used for the purpose of the evaluation of the premium collection condition and composition of all the respective matter on premium collection, various ratio analysis are computed which will give the actual proportion to the particular insurance company sum. The analysis chapter is separated in two parts as financial analysis and statistical analysis.

4.1 Financial Analysis

This analysis is deal with various financial ratios, which are related to premium collection. Financial ratios are studied to evaluate and analyze the performance of Nepal Life and General Insurance Company. Ratios are calculated as follows.

4.1.1 Life Insurance

4.1.1.1 Premium Collection on First life Insurance Premium to Total Life Premium Collection

Life insurance premium is the premium paid to the insurance company for insuring his life and contract to pay that amount for certain period. The insurer get amount back with bonus in expiry of the time or his beneficiary will get contract amount in expiry his life. First premium of life insurance hold significant important role in total life premium collection. It is regular amount that the policy holder should pay to the company till the expiry of time or his death. The ratio, premium collection on first life premium to total life premium collection is used to measure the contribution of premium collection on first life premium to total life premium.

It is computed using following equation.

Premium collection on first life premium to total life premium collection.

$$= \frac{\text{First Life Premium Collection}}{\text{Total Life Premium Collection}}$$

Table 4.1

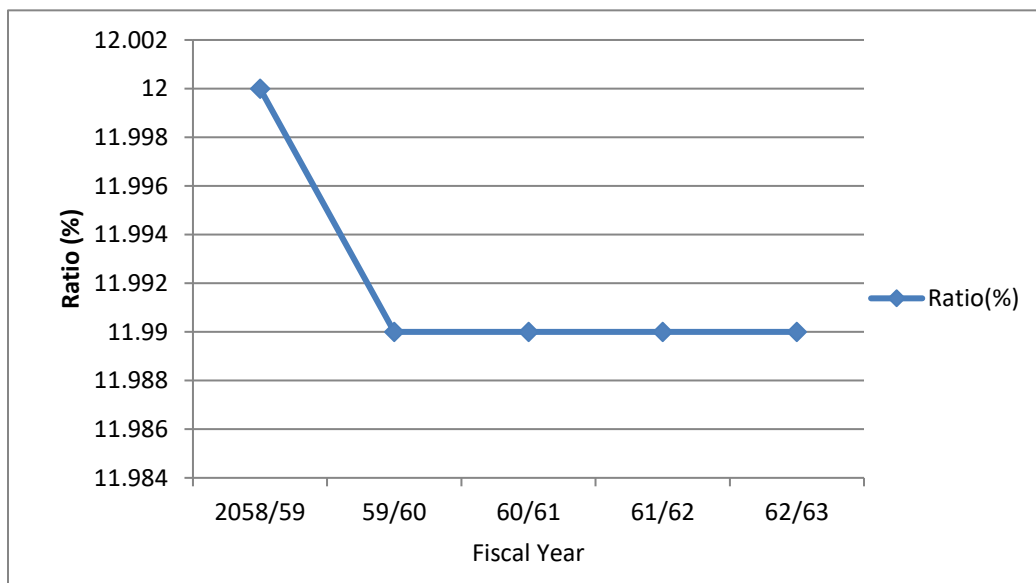
First Life Premium to Total life Premium Collection of RBS

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	12	11.99	11.99	11.99	11.99	11.99	0.0044	0.037

Source: Annual Report of RBS 058/59 to 062/063

Chart 4.1

First Life Premium to Total Life Premium Collection of RBS



Above table 4.1 and chart 4.1 revealed that the company's ratio on first life premium to total life premium collection of RBS was in almost same level i.e. approximately 12%. The CV and SD were negligible which means that the result was significant and satisfactory. The CV also showed that there was very minimum level of per unit of risk i.e.0.037%.

Table 4.2

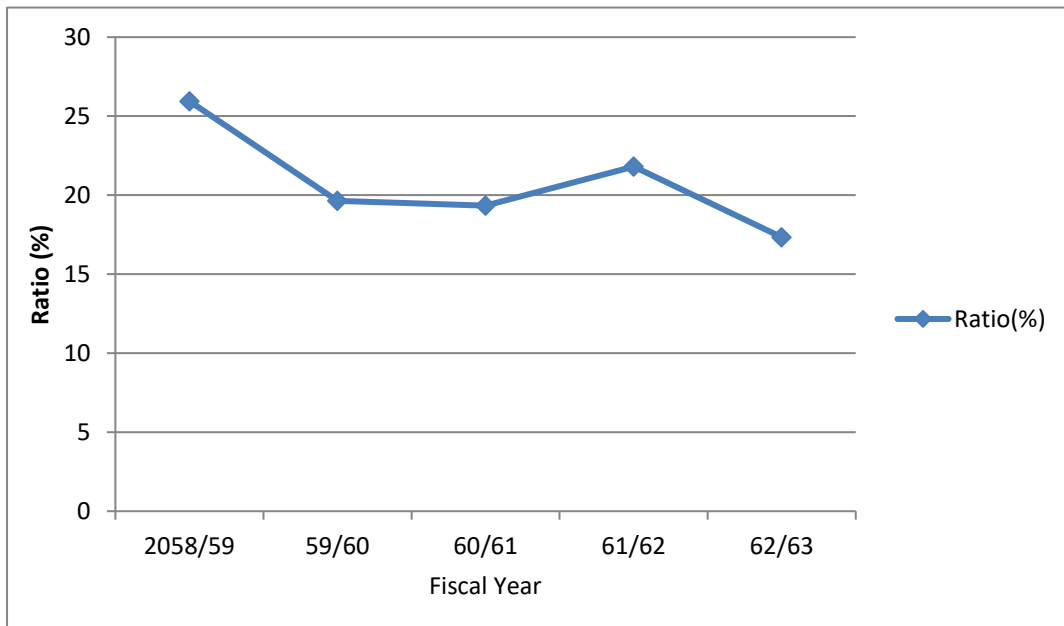
First Life Premium to Total life Premium Collection of NLGI

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	25.95	19.65	19.34	21.8	17.34	20.81	3.27	15.74

Source: Annual Report of RBS 058/59 to 062/063.

Chart 4.2

First Life Premium to Total life Premium Collection of NLGI



Above table 4.2 and chart 4.2 revealed that the company's ratio on first life premium collection to total life premium collection of NLGI was in fluctuating trend. The highest ratio was in the fiscal year 058/59 i.e. 25.95% and least was in the fiscal year 062/63 i.e. 17.34%.

The CV was 15.7412%. It shows that the ratios were little consistent and stable.

Table 4.3

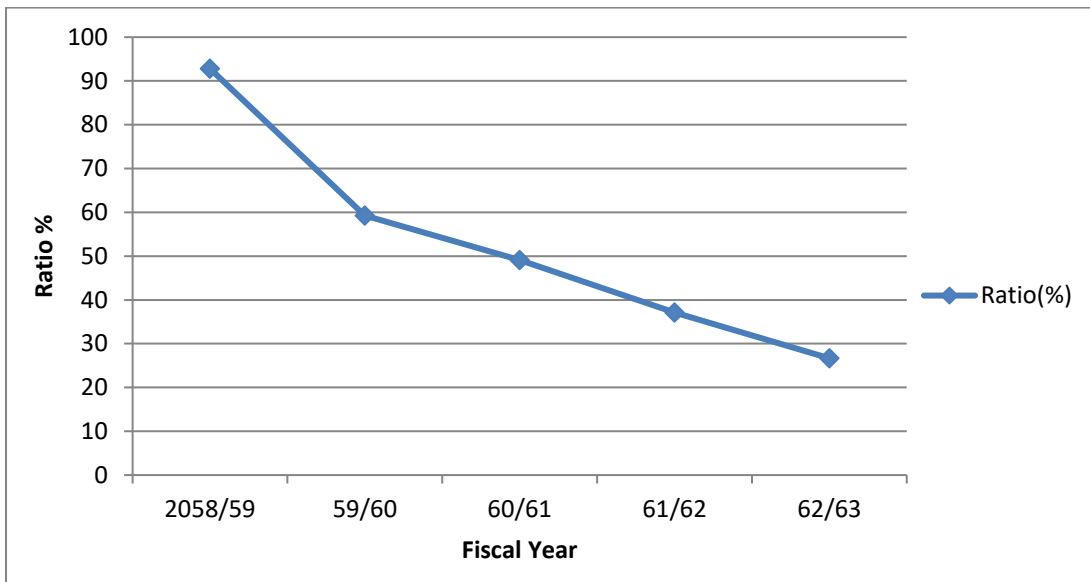
First Life Premium to Total Life Premium Collection of NLIC

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	92.80	59.25	49.07	37.15	26.67	52.98	25.41	47.95

Source: Annual Report of RBS 058/59 to 062/063.

Chart 4.3

First Life Premium to Total Life Premium Collection of NLIC



Above table 4.3 and chart 4.3 revealed that the company's ratio on first life premium collection to total life premium collection of NLIC was in decreasing trend from 058/59 to 062/63. This was due to abnormal situation of the country. It was 92.8% in 058/59, after that it goes down to 59.25, 49.07, 37.15 and 26.67 in 059/60, 060/61, 061/62 and 062/63 respectively.

The CV was 47.957 %. This shows that the ratios were not in stable and consistent.

Table 4.4

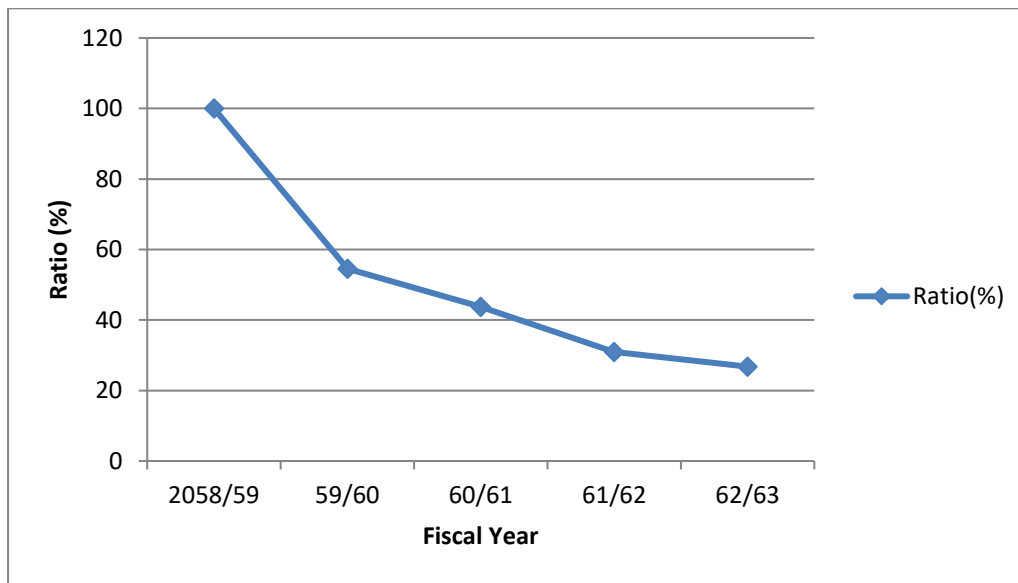
First Life Premium to Total Life Premium Collection of LIC

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	100	54.54	43.77	30.97	26.77	51.21	29.38	57.38

Source: - Annual Report of RBS 058/59 to 062/063

Chart 4.4

First Life Premium to Total Life Premium Collection of LIC



Regarding the first life premium collection to total life premium collection of LIC, the company's ratio was in decreasing trend. It was also due to abnormal situation of the country. It was decreasing continuously from 058/59 to 062/63. The highest value of CV i.e. 57.381 % showed that the ratios were not stable and consistent.

Table 4.5

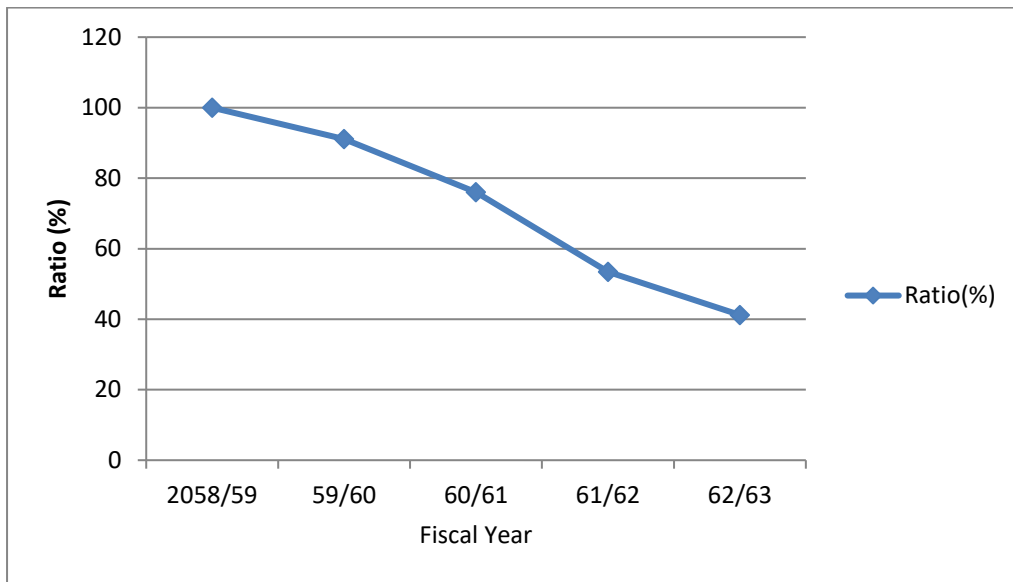
First Life Premium to Total life Premium Collection of ALICO

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	100	91.05	76.04	53.41	41.21	72.34	24.78	34.25

Source: Annual Report of RBS 058/59 to 062/063

Chart 4.5

First Life Premium to Total life Premium Collection of ALICO



Above table 4.5 and chart 4.5 revealed that the company's ratio on first life premium collection to total life premium collection of ALICO was also in decreasing trend. It was least in fiscal year 062/63 i.e. 41.21%. The CV was 34.254% which means that per unit risk of expected return was high. So the ratios were not stable and consistent.

4.1.1.2 Renewal Life Premium to Total Life Premium Collection

Life premium collection of person is continuous till the last date of policy period otherwise death of a policyholder and breaking of contract by any of party. Renewal life premium held the majority of life premium collection.

This ratio shows the weight of renewal life premium collection to total life premium collection. Following equation depicts these ratios.

Renewal life premium collection to total life premium collection

$$= \frac{\text{Renewal Life Premium Collection}}{\text{Total Life Premium Collection}}$$

Table 4.6

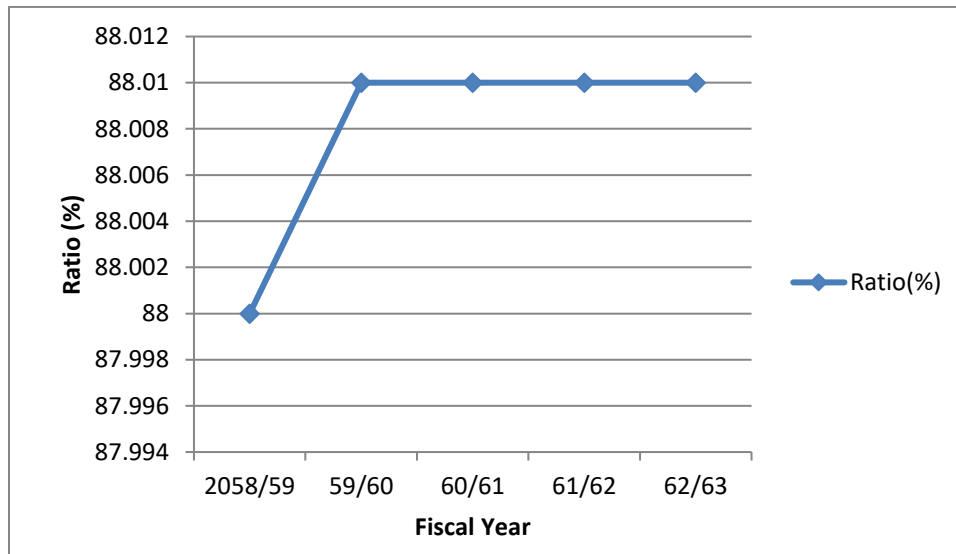
Renewal Life Premium Collection to Total Life Premium Collection of RBS

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	88	88.01	88.01	88.01	88.01	88.00	0.0044	0.0050

Source: Annual Report of RBS 058/59 to 062/063

Chart 4.6

Renewal Life Premium Collection to Total Life Premium Collection of RBS



The above table shows the ratio between renewal life premiums to total life premium of RBS. The ratios were almost same. This means that company's ratios were stable and consistent. The CV of 0.0050 % proves that the company was not suffering from risk.

Table 4.7

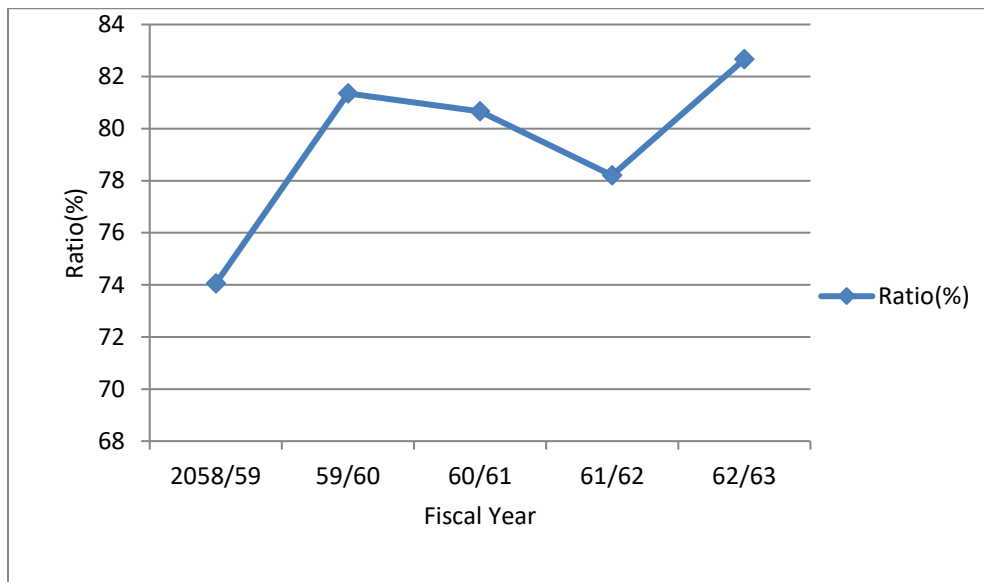
Renewal Life Premium Collection to Total Life Premium Collection of NLGI

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	74.05	81.35	80.66	78.20	82.66	79.38	3.39	4.27

Source: Annual Report of RBS 058/59 to 062/063.

Chart 4.7

Renewal Life Premium Collection to Total Life Premium Collection of NLGI



The ratio on renewal life premium to total life premium collection of NLGI was in fluctuating trend. The highest ratio was 82.66% in fiscal year 062/63 and least ratio was 74.05% in fiscal year 058/59. The calculated CV 4.275% showed the satisfactory result and reveal that the company was suffering negligible risk.

Table 4.8

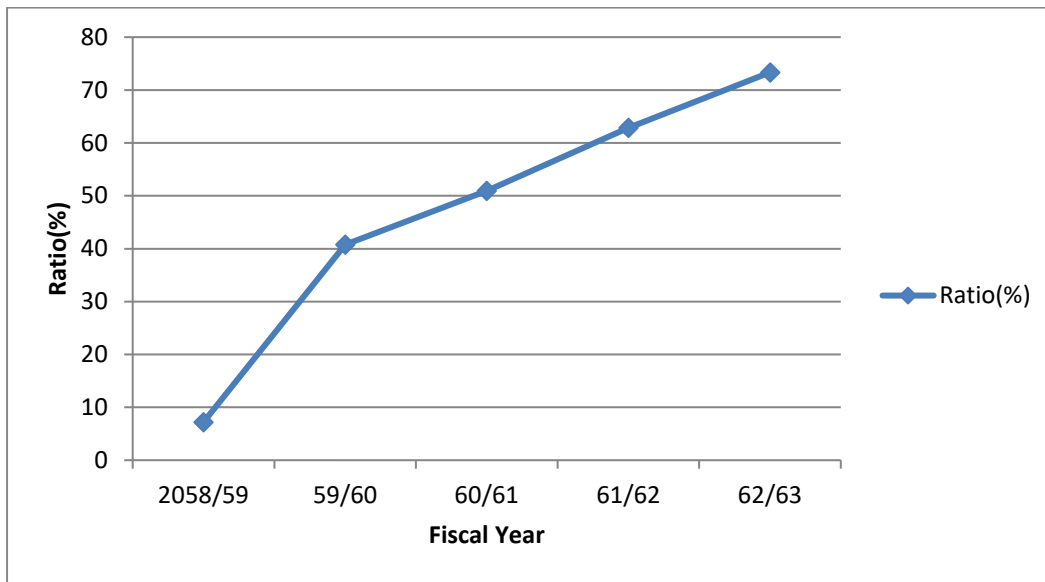
Renewal Life Premium Collection to Total Life Premium Collection of NLIC

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	7.2	40.75	50.93	62.85	73.33	47.01	25.41	54.05

Source: Annual Report of RBS 058/59 to 062/063

Chart 4.8

Renewal Life Premium Collection to Total Life Premium Collection of NLIC



The renewal life premium collection of NLIC was in increasing trend. This shows that the company's renewal life premium collection to total life premium collection was satisfactory. Among the study period the ratio was increases to 73.33% in fiscal year 062/63. The calculated CV 54.053% which was very high proves that the company's ratios were not stable and consistent.

Table 4.9

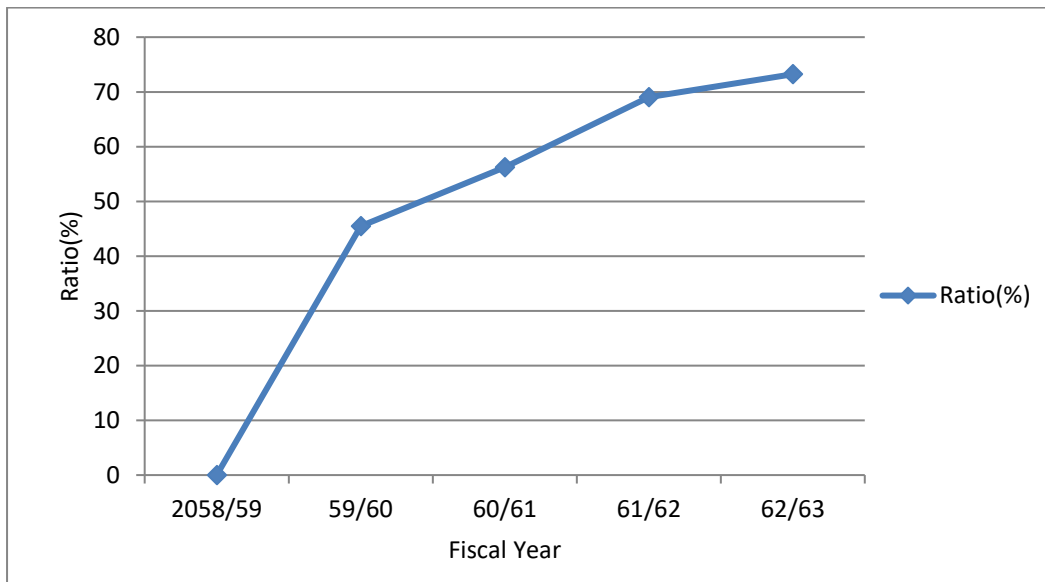
Renewal Life Premium Collection to Total Life Premium Collection of LIC

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	0	45.46	56.23	69.05	73.23	48.79	29.38	60.22

Source: Annual Report of RBS 058/59 to 062/063.

Chart 4.9

Renewal Life Premium Collection to Total Life Premium Collection of LIC



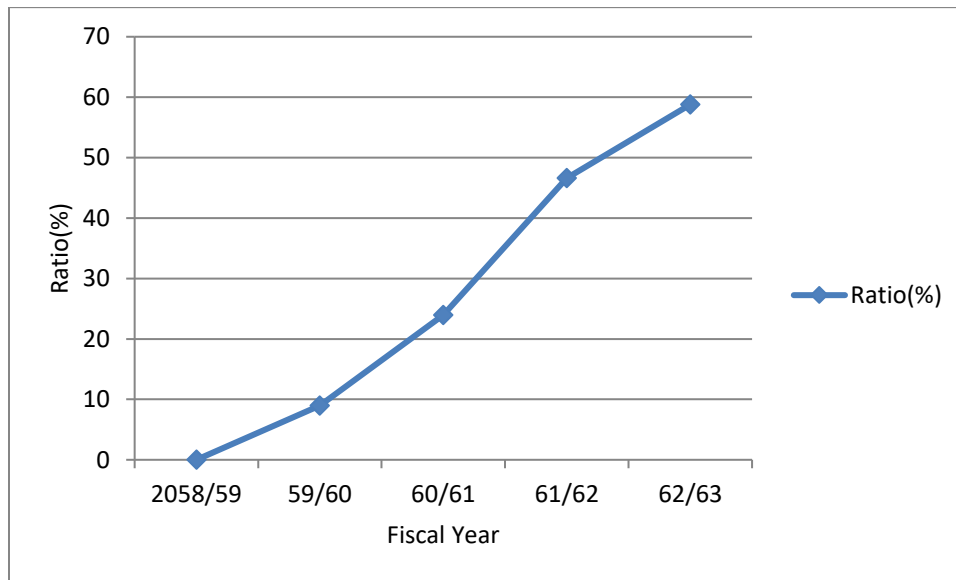
The above table 4.9 and chart 4.9 reveals that the company's ratio on renewal life premium collection to total life premium collection was in increasing trend. Its ratio was increasing from 058/59 to 062/63 continuously. The calculated CV was very high i.e. 60.229%, which shows that the ratios were not stable.

Table 4.10
Renewal Life Premium Collection to Total Life
Premium Collection of ALICO

Fiscal Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	0	8.95	23.95	46.59	58.79	27.65	24.78	89.60

Source: Annual Report of RBS 058/59 to 062/063.

Chart 4.10
Renewal Life Premium Collection to Total Life
Premium Collection of ALICO



The renewal life premium to total life premium ratio was in increasing trend. This means that the renewal life premium collection was satisfactory. But the calculated CV was maximum i.e. 89.603%, which means that their ratios were quite unstable. We can see in table 4.10 and chart 4.10 that per unit risk of this company is very much high as compare to other insurance companies.

4.1.1.3 Total Amount of Life premium Collection by Different Life Insurance Companies

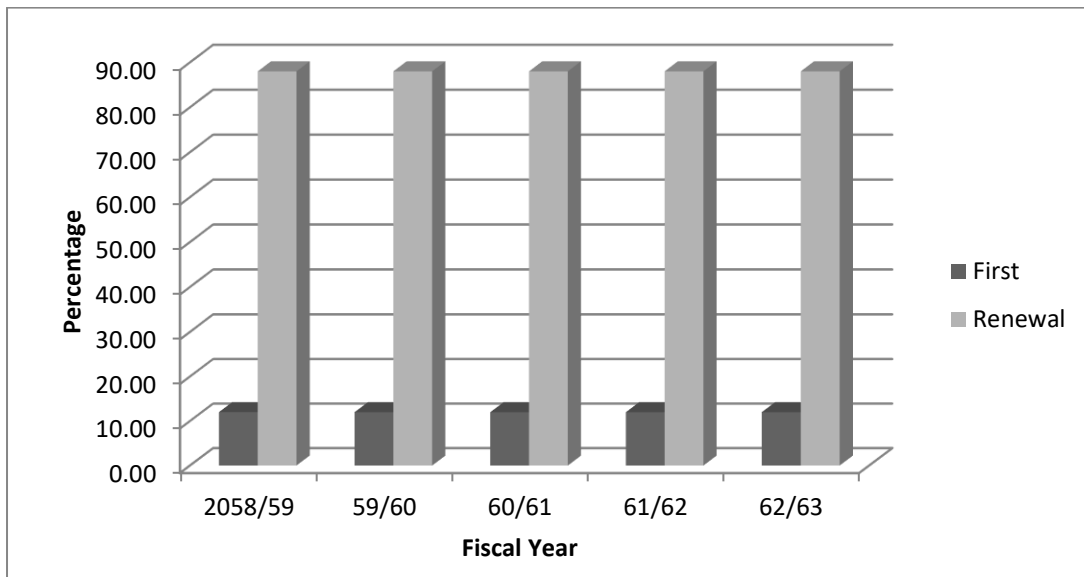
The total amount of life premium collected by life insurance companies as a first premium and renewal premium are tabulated as under.

Table 4.11
Life Premium Collection by RBS

Year/ Premium	2058/59	%	59/60	%	60/61	%	61/62	%	62/63	%
First	138434604	12	132143429	11.99	150847214	11.99	147717434	11.99	144875066	11.99
Renewal	1015187096	88	969051816	88.01	1106212904	88.01	1083261184	88.01	1062417152	88.01
Total	1153621700	100	11010195245	100	1257060118	100	1230978618	100	1207292218	100

Source: Annual reports of RBS and from insurance board.

Chart 4.11
Life Premium Collection by RBS



The above table 4.11 and chart 4.11 reveals that the majority part of life premium collection consists of renewal life premium. Renewal life premium ratios were almost same in every fiscal year i.e. 88% and first premium collection was almost

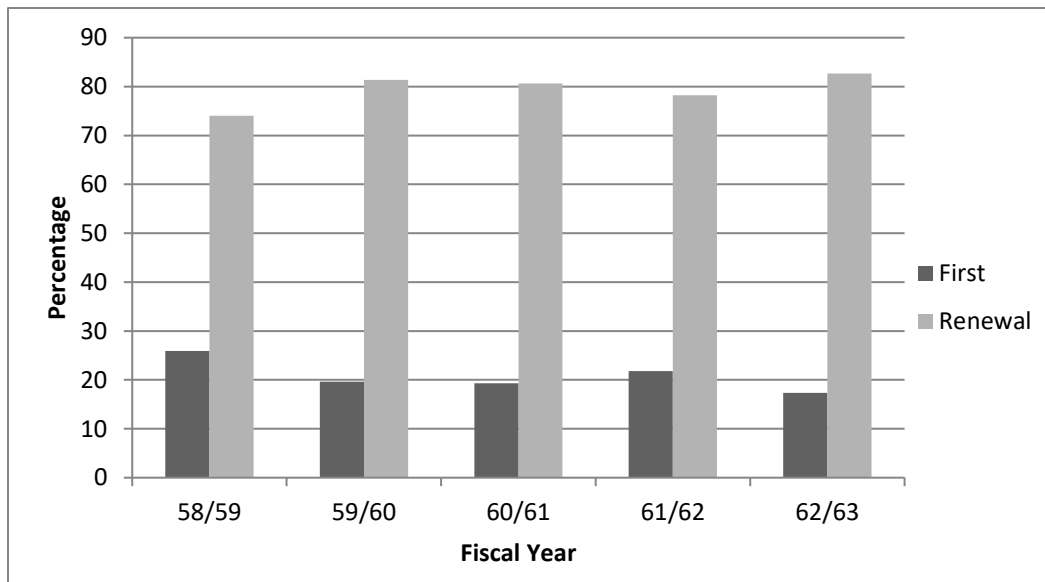
12% in every fiscal years. This means that the trend of ratio was quite stable and consistent.

Table 4.12
Life Premium Collection by NLGI

Year/ Premium	2058/59	%	59/60	%	60/61	%	61/62	%	62/63	%
First	61340052	25.95	59272955	18.65	59266315	19.34	86295475	21.80	75511771	17.34
Renewal	174999017	74.05	258547269	81.35	247041575	80.66	309404813	78.20	359725137	82.66
Total	236339069	100	317820224	100	306307890	100	395700288	100	435236908	100

Source: Annual Reports of NLGI from 058/59 to 62/63.

Chart 4.12
First and Renewal Premium Collection of NLGI



The majority part of the premium collection consists of renewal premium collection. The renewal premium collection was highest in fiscal year 062/63 i.e. 82.66% and lowest ratio of renewal premium collection 74.05% in fiscal year 058/59. Both first and renewal premium collection were in fluctuating trend.

Table 4.13

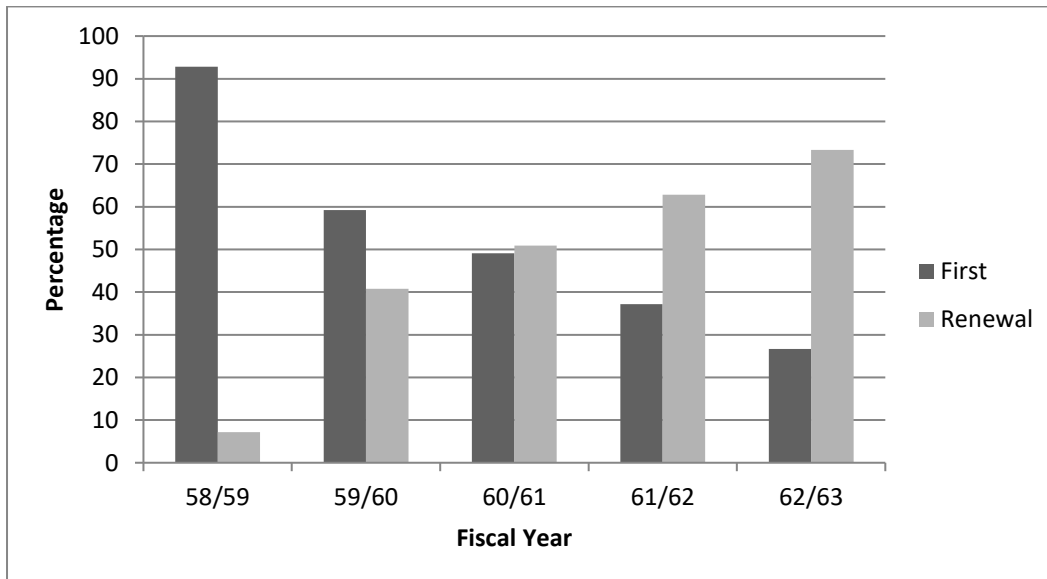
Life Premium Collection by NLIC

Year/ Premium	2058/59	%	59/60	%	60/61	%	61/62	%	62/63	%
First	80681204	92.8	111656439	59.25	162495419	49.07	172992241	37.15	153820190	26.67
Renewal	6252583	7.20	76762876	40.75	168623310	50.93	292650003	62.85	422986554	73.33
Total	869337987	100	188419315	100	331118729	100	465642244	100	576806744	100

Source: Annual reports of NLIC from 058/59 to 62/63.

Chart 4.13

First and Renewal Premium Collection of NLIC



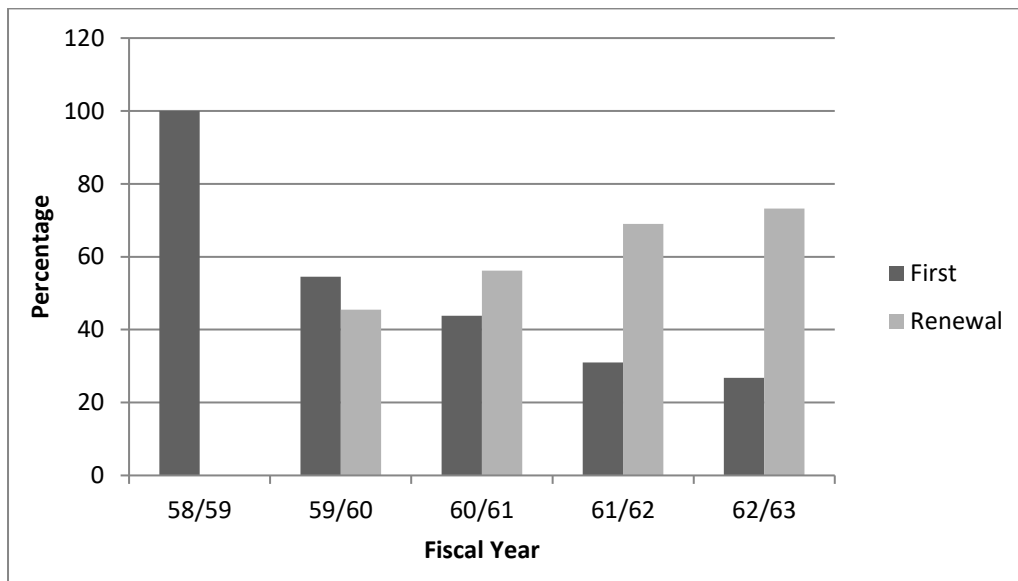
The above calculation table 4.13 and chart 4.13 revealed that the ratio of first life premium collection of NLIC was in decreasing trend and the renewal life premium collection of NLGI was in increasing trend.

Table 4.14
Life Premium Collection by LIC

Year/ Premium	2058/59	%	59/60	%	60/61	%	61/62	%	62/63	%
First	42418710	100	69962464	54.54	116462805	43.77	123606079	30.97	145367903	26.77
Renewal	0	0	58297957	45.46	149580378	56.23	275435297	69.03	397523624	73.23
Total	42418710	100	128260421	100	266043183	100	399041376	100	542891527	100

Source: Annual reports of LIC from 058/59 to 62/63.

Chart 4.14
First and Renewal Premium Collection of LIC



The above table 4.14 and chart 4.14 shows that first life premium ratio was in decreasing trend and renewal life premium ratio was in increasing trend. The first life premium collection was 100% in fiscal year 058/59.

Table 4.15

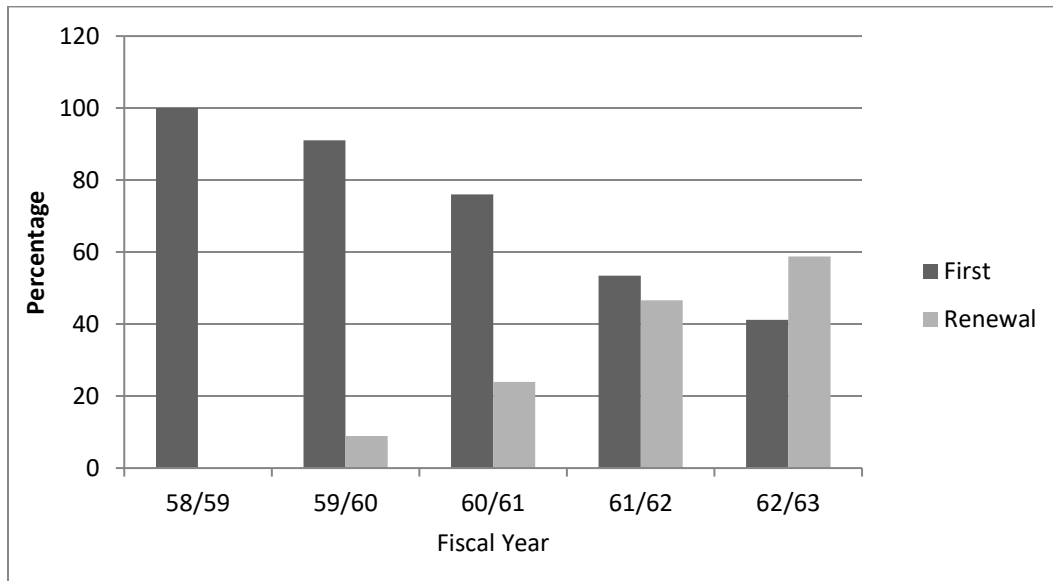
Life Premium Collection by ALICO

Year/ Premium	2058/59	%	59/60	%	60/61	%	61/62	%	62/63	%
First	11818526	100	78810763	91.05	251196426	76.05	346190515	53.41	398915320	41.21
Renewal	0	0	7747996	8.95	79127301	23.95	301967059	46.59	569082396	58.79
Total	11818526	100	86558759	100	330323727	100	648157574	100	967997716	100

Source: Annual reports of ALICO from 058/59 to 62/63.

Chart 4.15

First and Renewal Premium Collection of ALICO



The first life premium collection ratio of ALICO was 100% in 058/59 and it was decreasing continuously up to study period. It was 41.21% in fiscal year 062/63.

The above table 4.15 and chart 4.15 also reveals that the ratio of renewal life premium collection was in increasing trend.

4.1.1.4 Comparison of Life Premium Collection

Life premium collections of Life Insurance Company are fluctuating year by year. First premium collection plays important role. The analysis of percentage change in premium collection and its effect in total premium collection is done below.

Table 4.16
Comparison of Life Premium Collection of RBS

Year/Premium	058/59	59/60	%change	59/60	60/61	%change
First Premium	138434604	132143429	-4.54	132143429	150847214	14.15
Renewal Premium	1015187096	969051816	-4.54	969051816	1106212904	14.15
Total	1153621700	1101195245	-4.54	1101195245	1257060118	14.15

60/61	61/62	%change	61/62	62/63	%change
150847214	147717434	-2.07	147717434	144875066	-1.92
1106212904	1083261184	-2.07	1083261184	1062417152	-1.92
1257060118	1230978618	-2.07	1230978618	1207292218	-1.92

The above table 4.16 revealed that the comparison of life premium collection of RBS. The first, renewal and total life premium of RBS were fluctuating from year to year but with same percentage changes in first, renewal and total life premium collection. The percentage of changes in first, renewal and total life premium collection was same during the whole study period (fiscal year from 058/59 to 062/63). The highest changes was taken place in the fiscal year 060/61 i.e. 14.154%. The highest negative fluctuation in first, renewal and total life premium collection was in the fiscal year 059/60 i.e. – 4.544%.

Table 4.17

Comparison of Life Premium Collection of NLGI

Year/Column	058/59	59/60	%change	59/60	60/61	%change
First Premium	61340052	59272955	-3.36	59272955	59266315	-0.011
Renewal Premium	174999017	258547269	47.74	258547269	247041575	-4.45
Total	236339069	317820224	34.47	317820224	306307890	-3.62

60/61	61/62	%change	61/62	62/63	%change
59266315	86295475	45.60	86295475	75511771	-12.49
247041575	309404813	25.24	309404813	359725137	16.26
306307890	395700288	29.18	395700288	435236908	9.99

The above table reveals that the comparison of life insurance premium of NLGI. The table showed that the percentage changed in first and renewal life premium were fluctuating. There was positive change of 45.60% in first premium only in the fiscal year 061/62. The lowest negative fluctuation in first life premium collection was in the fiscal year 060/61. The trend of total premium collection was in decreasing trend. It was 34.476% in the fiscal year 059/60 and it was decreased to -3.622% in the fiscal year 060/61 which was least premium collection as compare to other fiscal years period. After that, it was increased to 29.183% and again decreased to 9.9915%. But this calculated results showed that the percentage of total premium collection was in decreasing trend.

Table 4.18
Comparison of Life Premium of NLIC

Year/Column	058/59	59/60	%change	59/60	60/61	%change
First Premium	80681204	111656439	38.39	111656439	162495419	45.53
Renewal Premium	6252583	76762876	1127.69	76762876	168623310	119.66
Total	869337987	188419315	-78.32	188419315	331118729	75.73

60/61	61/62	%change	61/62	62/63	%change
162495419	172992241	6.45	172992241	153820190	-11.08
168623310	292650003	73.55	292650003	422986554	44.53
331118729	465642244	40.62	465642244	576806744	23.87

The above table 4.18 showed the comparison of life premium of NLIC. The table clearly shows that there was high percentage change in renewal life premium collection. The changes in renewal premium collection was highest i.e. 1127.699% in the fiscal year 058/59. But thereafter the percentage changes in renewal life premium were decreasing up to 44.536% in the fiscal year 062/63. The table revealed that there was fluctuation in total premium collection. It was fluctuate negatively by -78.3261% in the fiscal year 059/60. The percentage changes in first premium collection was 38.29%, 45.53% in the fiscal year 059/60 and 060/61 respectively. Thereafter it was decreased by 6.45% in the fiscal year 061/62 and negatively changed by -11.08% in the fiscal year 062/63.

Table 4.19
Comparison of Life Premium of LIC

Year/Column	058/59	59/60	%change	59/60	60/61	%change
First Premium	42418710	69962464	64.93	69962464	116462805	66.46
Renewal Premium	0	58297957	Infinity	58297957	149580378	156.57
Total	42418710	128260421	202.36	128260421	266043183	107.42

60/61	61/62	%change	61/62	62/63	%change
116462805	123606079	6.13	123606079	145367903	17.60
149580378	275435297	84.13	275435297	397523624	44.32
266043183	399041376	49.99	399041376	542891527	36.04

The comparison of life premium of LIC was expressed in the table 4.19. The table revealed that there were not any negatively changes in first, renewal and total life premium collection. The highest changes of 66.465% in first premium collection were in the fiscal year 060/61 and the least changes of 6.133% were in the fiscal year 061/62. The trend of renewal premium collection was significant to the fiscal year from 058/59 to 061/62. But thereafter it was decreased by approximately 50% as compare to previous years in the fiscal year 062/63. The highest changes in total premium collection were in the fiscal year 059/60 but it was decreasing thereafter up to the study period (fiscal year 062/63).

Table 4.20
Comparison of Life Premium of ALICO

Year/Column	058/59	59/60	%change	59/60	60/61	%change
First Premium	11818526	78810763	566.84	78810763	251196426	218.73
Renewal Premium	0	7747996	Infinity	7747996	79127301	921.26
Total	11818526	86558759	632.39	86558759	330323727	281.61

60/61	61/62	%change	61/62	62/63	%change
251196426	346190515	37.81	346190515	398915320	15.23
79127301	301967059	281.62	301967059	569082396	88.45
330323727	648157574	96.21	648157574	967997716	49.34

The above table 4.20 revealed the comparison of life premium of ALICO. The percentage of changes in first, renewal and total life premium collection was in decreasing trend during the study period. The highest changes in first premium collection was in the fiscal year 059/60 i.e. 566.84% which was very satisfactory result of the company. Thereafter it was in decreasing trend. The least changes in first premium collection was in the fiscal year 062/63 i.e. 15.23% which shows that the result of the company was not satisfactory. The tables showed that the company had significant result in the fiscal year 059/60 as comparison to other fiscal years. The renewal and total premium collection trend was highly fluctuating year to year.

Table 4.21

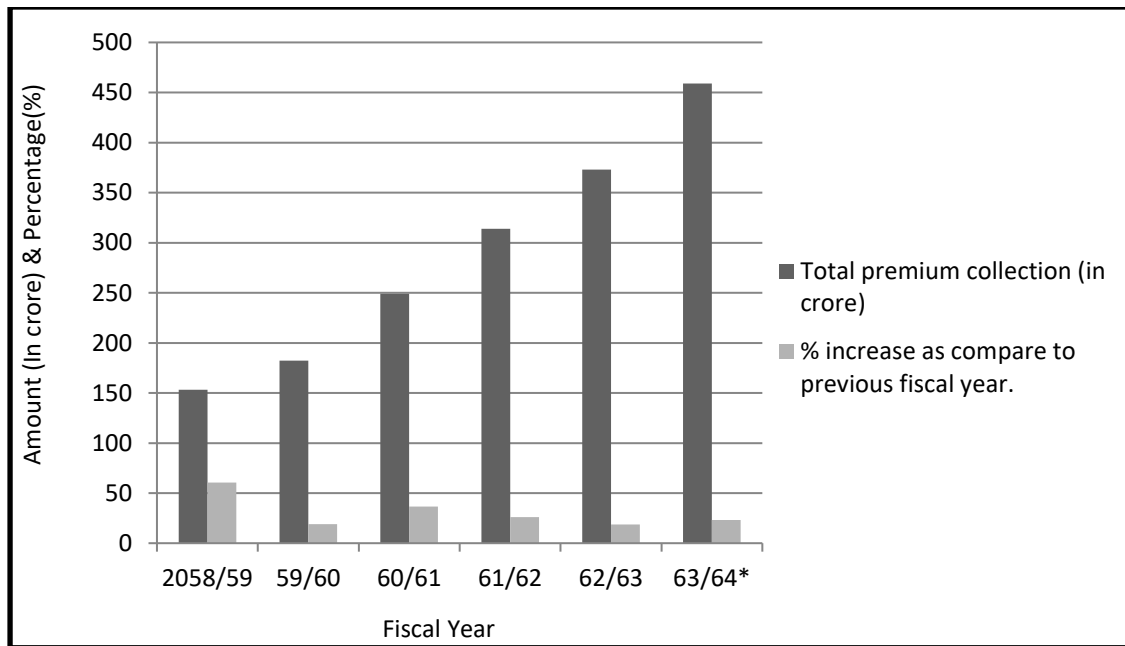
Total Premium Collection and % change (increase) in Premium Collection in Comparison to Previous Fiscal year of all Life Insurance Companies

Fiscal year	Total Premium Collection (in crore)	% increase as compare to previous year
2058/59	153.11	60.43 %
59/60	182.23	19.01 %
60/61	249.09	36.69 %
61/62	313.95	26.04 %
62/63	373.02	18.82 %
63/64*	459.00	23.05 %

**Note: Expected total premium collection and expenses increase as compare to previous fiscal year*

Chart 4.16

Total Premium Collection & % Increase as Compare to Previous Fiscal Year



The above table 4.21 and chart 4.16 revealed that the comparison of total premium collection within the study period. According to above table and chart we conclude that the percentage of total premium collection was in increasing trend as

compare to previous fiscal years. There was Rs. 153.11 crore premium collection in the fiscal year 058/59, thereafter the total premium collection were increased by 19.01%, 36.69%, 26.04%,18.82% and 23.05% in the fiscal year 059/60, 060/61, 061/62, 062/63 and 063/64 respectively. The table also revealed that the highest increase in total premium collection was in the fiscal year 058/59 as comparison to other fiscal years. The data of 063/64 was expected data provided by Beema Samiti. The bar diagram of the chart also revealed that the amount of total premium collection were increased, but the percentage of increase as compare to previous fiscal year was in fluctuating trend.

4.1.1.5 Claims Paid

Insurance company ensures compensation that if the accident, damage, death, disablement, theft happened to property and life of the policy holder with in the policy period. Delay in claim paying may damage the goodwill of the company. Customer may run away from their hand. On the other hand if claim paid held the majority part of the total premium collection, insurance company can not arrange other management expenses and return to owners.

Claim Paid to Premium Collection

It is the ratio that measure claim paid to premium collection. It is the portion of claim paid from the premium collection. Following equation is used to calculate the ratio. The annual reports of RBS have not published from 2058/59 till now. Hence due to unavailability of data, RBS is not included in this ration calculation.

$$\text{Claim Paid to Premium Collection} = \frac{\text{Claim Paid}}{\text{Total Premium Collection}}$$

Table 4.22

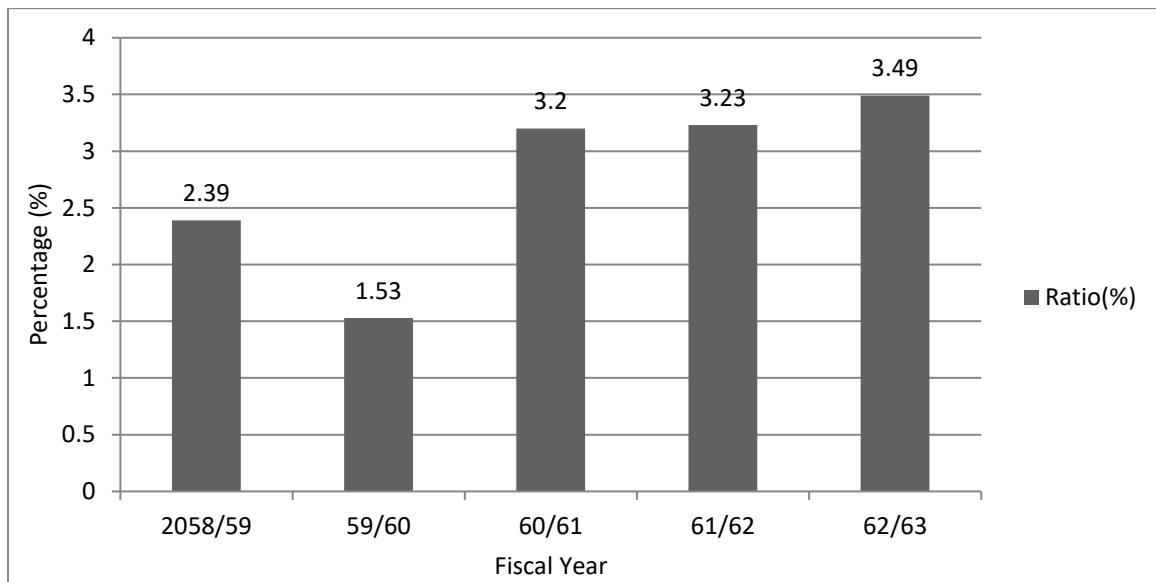
Claims Paid to Premium Collection of NLGI

Year	2058/59	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	2.39	1.53	3.2	3.23	3.49	2.76	0.80	29.10

Source: Annual Report of NLGI 058/59 to 062/063

Chart 4.17

Claims Paid by NLGI



Above table 4.22 and chart 4.17 revealed the ratio of claims paid to total premium collection of NLGI. The ratio lies in between 1.53% to 3.49%. The highest claims paid 3.49% was in the fiscal year 062/63 and lowest claim paid 1.53% was in the fiscal year 059/60. The ratios of claims paid showed that the life insurance was lowered risky. The ratio of claims paid was slightly increased from the fiscal year 060/61 to the study period i.e. fiscal year 062/63. The average of 2.768% covered the ratio of claims paid to total life premium collection. The CV of 29.11% means that there was little inconsistency in claims paid.

Table 4.23

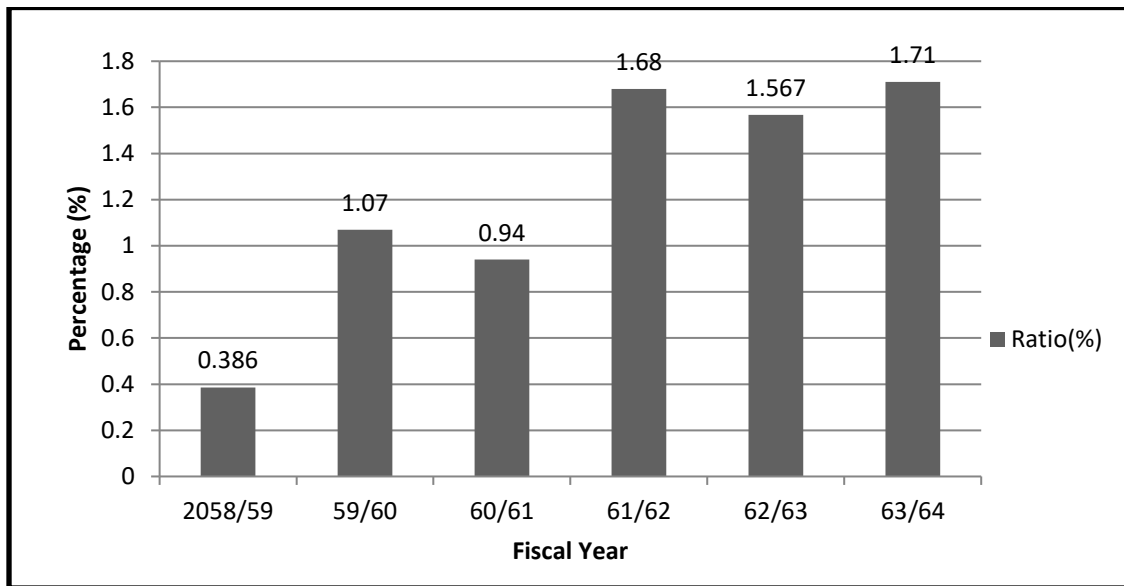
Claims Paid to Premium Collection of NLIC

Year	2058/59	59/60	60/61	61/62	62/63	63/64	Mean (%)	S.D.	C.V.(%)
Ratio(%)	0.386	1.07	0.94	1.68	1.56	1.71	1.22	0.52	42.68

Source: Annual Report of NLIC 058/59 to 063/064

Chart 4.18

Claims Paid to Premium Collection of NLIC



Above calculation reveal that the claims paid of NLIC were in fluctuating trend. The highest claim paid to total premium collection was 1.71% in the fiscal year 063/64 and lowest claim paid to total premium collection was 0.386% in the fiscal year 058/59. The above chart 4.23 revealed that the ratios of claims paid to total premium collection were in fluctuating trend. The average was 1.225% and the calculated CV was 42.68% which means that there were inconsistency in claims paid and ratios were not stable.

Table 4.24

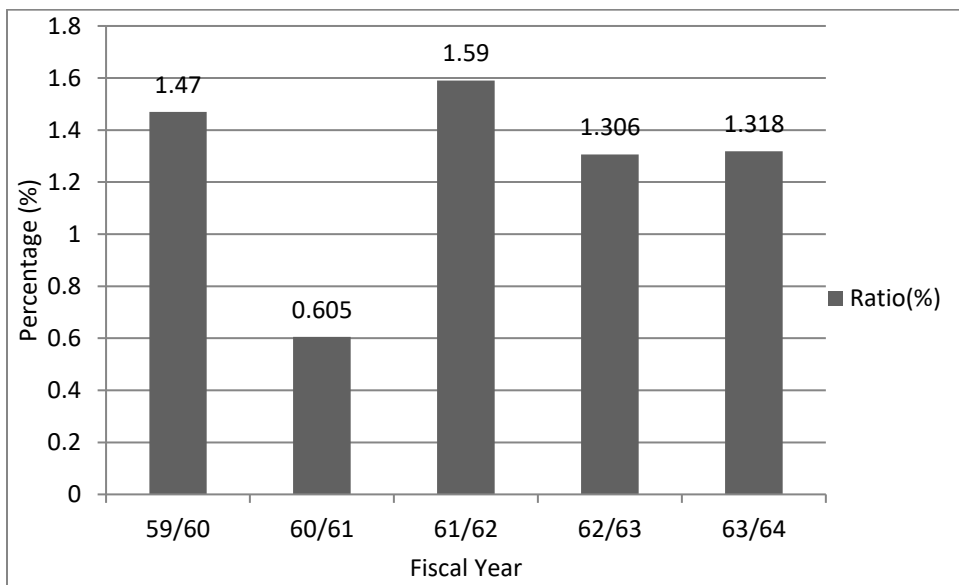
Claims Paid to Premium Collection of LIC

Year	59/60	60/61	61/62	62/63	63/64	Mean (%)	S.D.	C.V. (%)
Ratio(%)	1.47	0.60	1.59	1.30	1.31	1.25	0.38	30.46

Source: Annual Reports of LIC

Chart 4.19

Claims Paid by LIC



The above table 4.24 and chart 4.19 revealed the claims paid to total premium collection of LIC. The chart showed that there was fluctuation in ratios of claims paid to total premium collection. The highest claims paid were 1.59% in the fiscal year 061/62 and lowest claims paid was 0.605% in the fiscal year 060/61. The average of 1.257% of total premium collection went to claims paid by the company. The calculated CV was 30.468% which means that there were little inconsistency in the claims paid and ratios were not stable.

Table 4.25

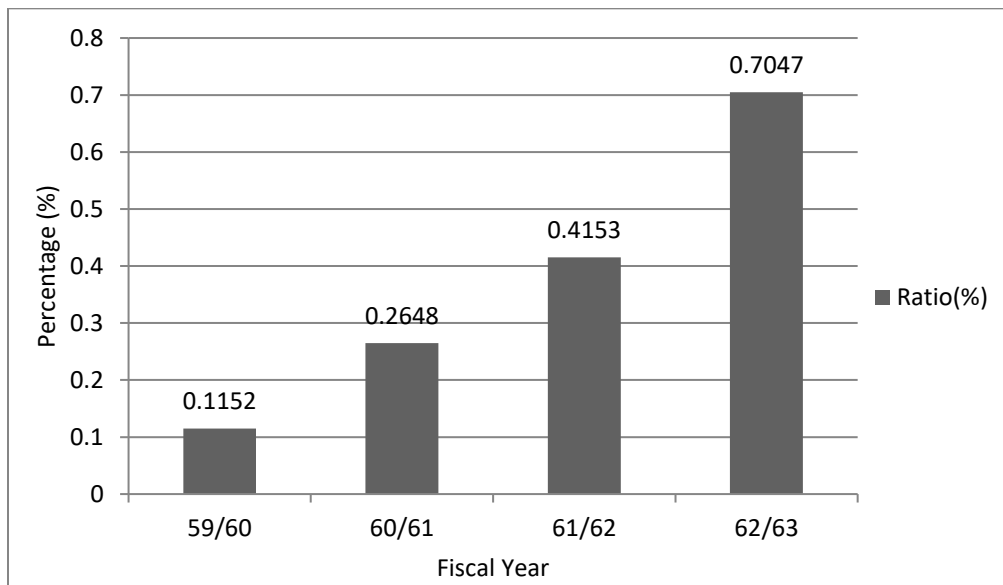
Claims Paid to Premium Collection of ALICO

Year	59/60	60/61	61/62	62/63	Mean (%)	S.D.	C.V. (%)
Ratio(%)	0.11	0.26	0.41	0.70	0.37	0.25	67.10

Source: Annual Report of ALICO 059/60 to 062/063

Chart 4.20

Claims Paid by ALICO



From the above table 4.25 and chart 4.20, it indicates that the ration of claims paid to total premium collection were in increasing trend. The ratios were ranges from 0.1152% to 0.7047%. The average was 0.375% which indicates that the company was suffering from low risk in claims paid. But the calculated CV was 67.103% which was very high. This high CV indicates that ratio of claims paid to total premium collection of ALICO is inconsistency and were not stable.

4.1.2 Evaluation of Investment Pattern and Composition through Financial Tool

Investment is the crucial activity of every insurance company. It collected investment fund in form of premium and invests in various sectors for profit motive. It has to follow the rules and regulation of investment regulated by Insurance Board of Nepal. They have to invest 75 % of their investable fund in compulsory sectors and rest 25 % in other sectors. For the purpose of the evaluation of the investment pattern and composition among the portfolios, the trend analysis and 'F' test are used. For the comparison of all respective matter on investment, the mean, standard deviation and coefficient of various is also used. Likewise, the ratio analysis is used to evaluate the return on respective portfolio and investment amount. To attain the objectives of the study, all the concerned studies and analysis are done. The evaluation chapter is separated in two parts as financial analysis and statistical analysis.

Life Premium is collected through the life insurance policies. This premium is returnable along with bonus to the policy holder. So the life fund should be invested in areas having higher return and thus the company able to give more bonuses to their customer.

In investment patterns of insurance companies, investment of insurance companies is divided in four parts. They are:

- Governmental Securities,
- Fixed Deposits on Commercial & Development Bank,
- Fixed Deposits on Finance Companies and
- Miscellaneous

All investment patterns are presented in the above mentioned sequence.

Investment Pattern of Insurance Companies

The portion of life investment on government securities, fixed deposits and investment in miscellaneous (share, debenture, CIT etc) sectors are measured by following ration.

Investment on Government Securities to Total Investment

$$= \frac{\text{Investment on Government Securities}}{\text{Total investment}} \times 100\%$$

Investment on Fixed Deposit in Bank to Total Investment

$$= \frac{\text{Investment on Fixed Deposit in Bank}}{\text{Total Investment}} \times 100\%$$

Investment on Financial Deposit to Total Investment

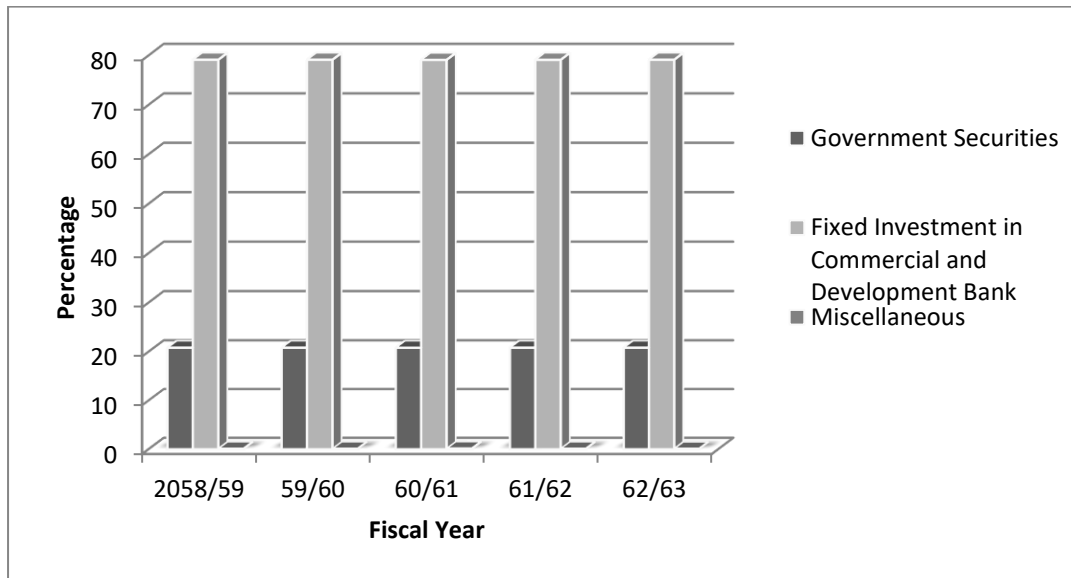
$$= \frac{\text{Investment on Fixed Financial Deposit}}{\text{Total Investment}} \times 100\%$$

Table 4.26

Investment Pattern of RBS

Investment /Fiscal Year (in Percentage)			58/59	59/60	60/61	61/62	62/63
Government Securities			20.8	20.8	20.79	20.8	20.8
Fixed Investment in Commercial and Development Bank			79.11	79.11	79.08	79.1	79.11
Miscellaneous			0.09	0.09	0.12	0.091	0.084
Total			100	100	99.99	99.99	99.99
Average (%)	S.D.	C.V.(%)					
20.79	0.00044	0.0021					
79.10	0.013	0.016					
0.094	0.013	13.70					

Chart 4.21
Investment Pattern of RBS



The above table 4.26 and chart 4.21 revealed the investment pattern of RBS. The above table showed that RBS had invested its fund on government securities, fixed deposits on commercial and development banks and investment in miscellaneous sectors such as share, debentures, short term investment, CIT etc. The table revealed that investment on government securities and fixed investment were not fluctuated from one fiscal year to another fiscal year. The investment was 20.8% and 79.11% on government securities and fixed investment in commercial and development bank respectively. There was no any investment on financial companies as fixed deposit. The average investment of 20.79%, 79.102% and 0.094% of total investment were invested in government securities, fixed deposit and miscellaneous respectively. The calculated CV of 0.002%, 0.016% and 13.70% revealed that the ratios of investment made on government securities and bank fixed deposits were significant but there is little inconsistency on investment made on other sectors like share, debenture, CIT etc.

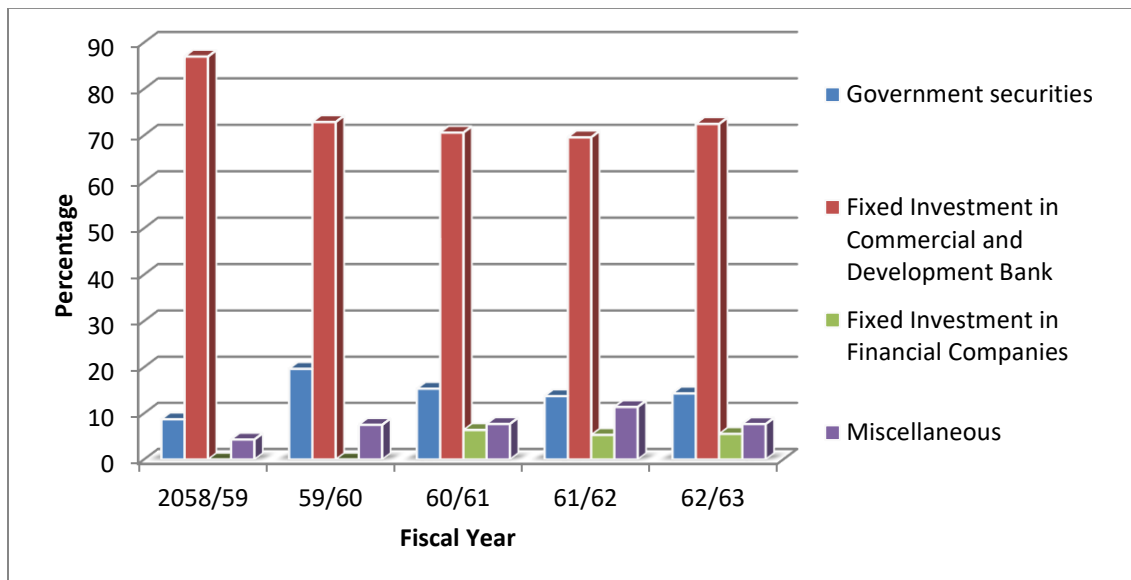
Table 4.27

Investment Pattern of NLGI

Investment /Fiscal year (in percentage)			58/59	59/60	60/61	61/62	62/63
Government securities			8.71	19.64	15.34	13.73	14.31
Fixed Investment in Commercial and Development Bank			86.97	72.87	70.59	69.58	72.47
Fixed Investment in Financial Companies			0	0	6.38	5.32	5.54
Miscellaneous			4.32	7.5	7.69	11.37	7.67
Total			100	100.01	100	100	99.99
Average(%)	S.D.	C.V. (%)					
14.34	3.91	27.26					
74.49	7.10	9.53					
3.44	3.17	92.00					
7.71	2.49	32.38					

Chart 4.22

Investment Pattern of NLGI



The above table 4.27 and chart 4.22 revealed that the investment made on government securities was in fluctuating trend. The highest investment on government securities was 19.64% of total investment in the fiscal year 059/60. The highest investment on fixed deposit on commercial and development bank

was 86.97% in the fiscal year 058/59. there was no investment on fixed deposit in financial companies in the fiscal year 058/59 and 059/60 but thereafter 6.38%, 5.32% and 5.54% of total investment was made on fixed deposit in financial companies. The average of 14.34%, 74.49%, 3.45% and 7.71% of total investment went to government securities, fixed investment in banks, fixed investment in financial companies and investment in miscellaneous sectors respectively.

The investments in miscellaneous sectors were increasing from the fiscal year 058/59 to 061/62 thereafter it was decreased in the fiscal year 062/63. The calculated CV of 27.25%, 9.53%, 92.0% and 32.38% of investment in government securities, fixed deposit in banking sectors, fixed deposit in financial companies and investment in miscellaneous sectors revealed that there was little bit inconsistency in the investment made on government securities and fixed deposit in commercial and development bank. The high CV of 92.0% revealed that there was high inconsistency and ratios of investment made on fixed deposits of financial companies were not stable. There was also inconsistency in the ratios of investment made on miscellaneous.

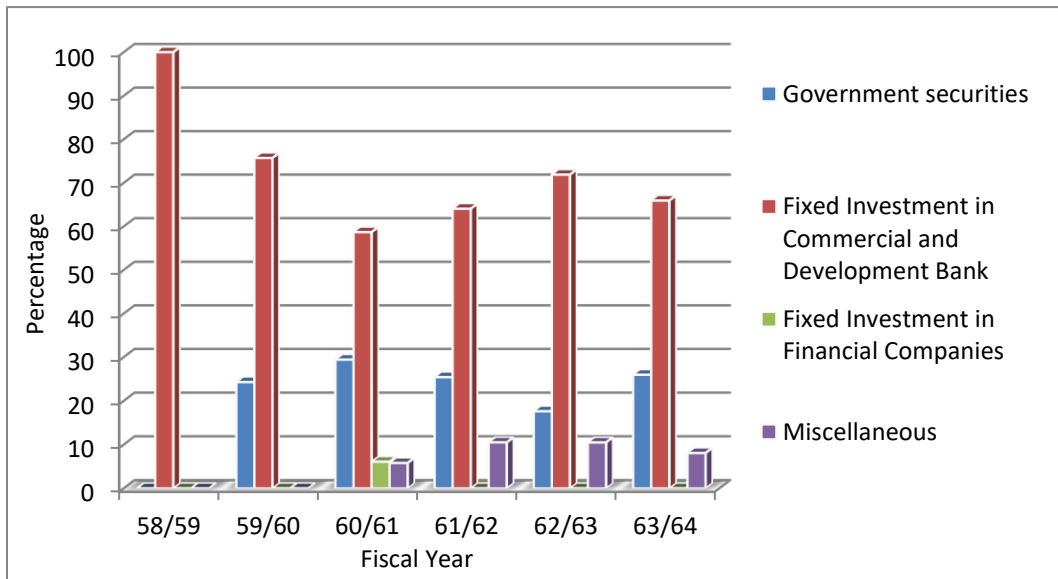
Table 4.28

Investment Pattern of NLIC

Investment /Fiscal year (in percentage)			58/59	59/60	60/61	61/62	62/63	63/64
Government securities			0	24.29	29.43	25.42	17.63	25.97
Fixed Investment in Commercial and Development Bank			100	75.71	58.68	64.06	71.88	65.95
Fixed Investment in Financial Companies			0	0	6.09	0	0	0
Miscellaneous			0	0	5.8	10.52	10.5	8.08
Total			100	100	100	100	100	100
Average(%)	S.D.	C.V.(%)						
20.45	10.73	52.50						
72.71	14.64	20.13						
1.01	2.48	244.94						
5.81	4.83	83.11						

Chart 4.23

Investment Pattern of NLIC



The above calculation in the table 4.28 and bar diagram of chart 4.23 revealed the investment pattern of NLIC. The investment in government securities were fluctuating in the study period. The highest investment of 29.43% out of total

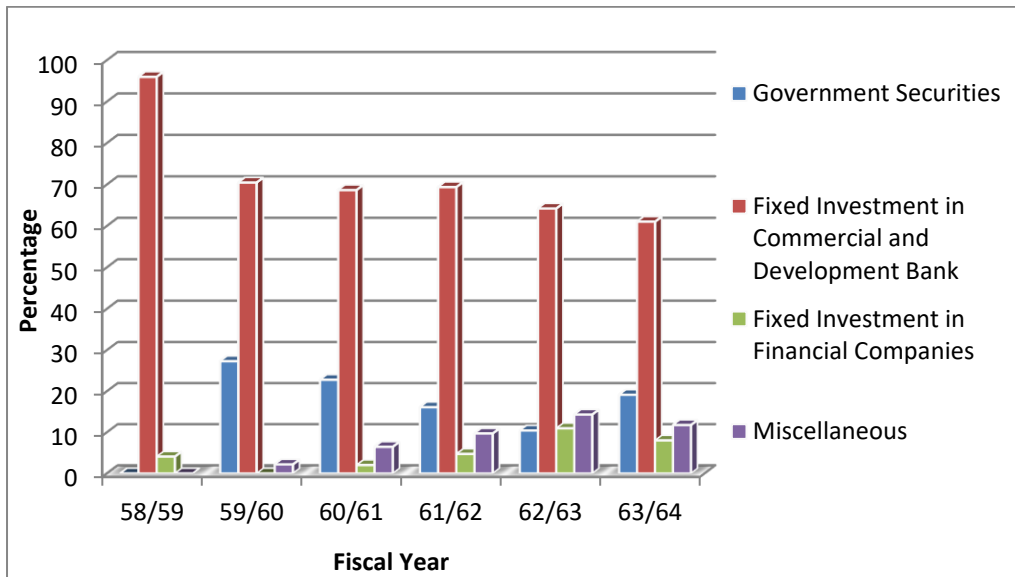
investment in government securities was made in the fiscal year 060/61. There was no any investment on government securities in the fiscal year 058/59. The investment on government securities was 24.29% in the fiscal year 059/60 and it rose to 29.43% which was highest percentage of investment in government securities. There after it was decreased to 25.42% and 17.63% in the fiscal year 060/61 and 061/62. The percentage was again increased to 25.97% in the fiscal year 062/63. The investment in fixed deposit in commercial and development banks was 100% in the fiscal year 058/59. Later it was decreased to 75.71% and 58.68% in the fiscal year 059/60 and 060/61. Then after the investment again picked up to 64.06%, 71.88% and 65.95% in the fiscal year 061/62, 062/63 and 063/64 respectively. There was only one investment of 6.09% of total investment in fixed deposit in financial companies in the fiscal year 060/61. The company did not invest in other sectors like share, debenture, short term investment etc up to the fiscal year 059/60. then after the company invested its fund as miscellaneous investment of 5.8%, 10.52%, 10.5% and 8.08% in the fiscal year 060/61, 061/62, 062/63 and 063/64 respectively.

The average investment of 20.45 %, 72.71%, 1.01% and 5.81% out of total investment went to government securities, fixed deposits in commercial and development bank, fixed deposit in financial companies and miscellaneous investment respectively. The company had invested its fund more in fixed deposits in commercial and development bank as compare to other sectors. The calculated CV of investment in government sectors, fixed deposits in bank, fixed deposits in financial companies and investment as miscellaneous was 52.50%, 20.13%, 244.94% and 83.10% respectively. The ratios of investment in fixed deposit in banks are little bit inconsistency. But the high CV in investment in other three sectors revealed that investment ratios are insignificant, inconsistency and not stable.

Table 4.29
Investment Pattern of LIC

Investment /Fiscal year (in percentage)			58/59	59/60	60/61	61/62	62/63	63/64
Government Securities			0	27.33	22.8	16.13	10.45	19.14
Fixed Investment in Commercial and Development Bank			95.98	70.47	68.67	69.39	64.22	61.04
Fixed Investment in Financial Companies			4.1	0	2.04	4.75	10.99	8.04
Miscellaneous			0	2.2	6.47	9.73	14.33	11.78
Total			100.08	100	99.98	100	99.992	100
Average (%)	S.D.	C.V.(%)						
15.97	9.71	60.77						
71.63	12.45	17.38						
4.98	3.99	80.09						
7.42	5.57	75.13						

Chart 4.24
Investment Pattern of LIC



The ratios of investment in government securities to total investment was 0%, 27.33%, 22.80%, 16.13%, 10.45% and 19.14% in the fiscal year from 058/59 to

063/64. This calculated result exposed that the investment in decreasing trend to the fiscal year 062/63. After that it rose to 19.14% in the fiscal year 063/64. The investment in fixed deposit in commercial and development were also in decreasing trend. But there was slightly increased in the investment in fixed deposit in banks in the fiscal year 061/62. The highest investment out of total investment in fixed deposit in commercial and development banks was 95.98%. There were fluctuations in the investment made in financial companies. The investment in financial companies lies in between 0% to 10.99%. The company had also started to invest in other sectors like share, debentures etc. from the fiscal year 059/60. The investment was 0%, 2.2%, 6.47%, 9.73%, 14.33% and 11.78% in the fiscal year 058/59, 059/60, 060/61, 061/62, 062/63 and 063/64 respectively. The bar diagram of investment in miscellaneous showed that the investment was in increasing trend but it was slightly felt to 11.78% in 063/64. the average of 15.97%, 71.62%, 4.98% and 7.41% out of total investment were went to government securities, fixed investment in commercial and development banks, fixed investment in financial securities and investment as miscellaneous.

The calculated high CV of 60.77%, 80.09% and 75.12% revealed that there were inconsistency and ratios were not stable in the investment made in government securities, fixed deposits in financial companies and investment in miscellaneous sectors. There was also little inconsistency in the investment made of fixed deposit in commercial and development banks.

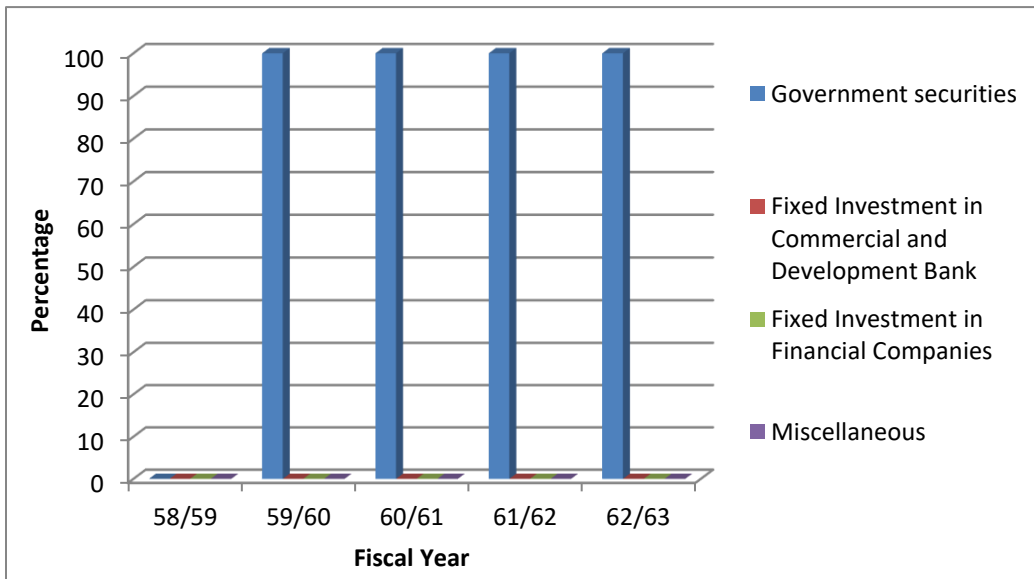
Table 4.30

Investment Pattern of ALICO

Investment /Fiscal year (in percentage)		58/59	59/60	60/61	61/62	62/63
Government securities		0	100	100	100	100
Fixed Investment in Commercial and Development Bank		0	0	0	0	0
Fixed Investment in Financial Companies		0	0	0	0	0
Miscellaneous		0	0	0	0	0
Total		0	100	100	100	100
Average(%)	S.D.	C.V.(%)				
80	44.72	55.90				
0	0	0				
0	0	0				
0	0	0				

Chart 4.25

Investment Pattern of ALICO



The above table 4.30 and chart 4.25 revealed the investment made by ALICO in different sectors. The table and the bar diagram exposed that there were not any investment in fixed deposits in commercial, development banks & financial

companies. The diagram and table also showed that there was no any miscellaneous investment. The company did not have any investment in the fiscal year 058/59. But the company had invested portion of its fund only in government securities from fiscal year 059/60 to 062/63. The average of 80% out of total investment indicates the percentage of investment in government securities. But the investment amount as compare to premium collection was very low. The high standard deviation of 44.72% indicates the total risk of the company. The high value of CV i.e. 55.90% indicates that the investment of ALICO was highly inconsistent and ratios of investment were not stable.

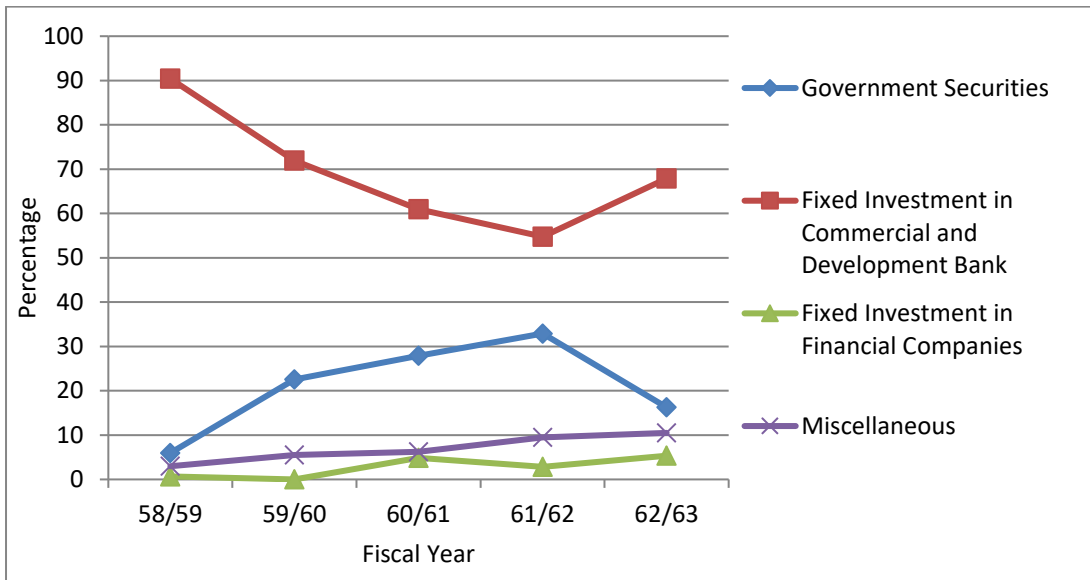
Table 4.31

Investment Pattern of all life Insurance Companies in Aggregate

Investment /Fiscal year (in percentage)	58/59	59/60	60/61	61/62	62/63
Government Securities	5.97	22.53	27.91	32.91	16.24
Fixed Investment in Commercial and Development Bank	90.4	71.95	60.96	54.77	67.9
Fixed Investment in Financial Companies	0.66	0	4.86	2.86	5.35
Miscellaneous	2.98	5.52	6.26	9.46	10.5
Total	100	100	99.99	100	99.99
Average(%)		S.D.	C.V.(%)		
21.11	10.49	49.70			
69.19	13.55	19.58			
2.74	2.40	87.62			
6.94	3.04	43.91			

Chart 4.26

Investment Pattern of all life Insurance Companies in Aggregate



The above table 4.31 chart 4.26 revealed that the investment pattern of all selected life insurance companies in different sectors. All the companies had given more priority to invest in fixed deposit in commercial and development banks. The average of 69.19% indicates the investment made in fixed deposits in commercial and development bank out of total investment. In aggregate the percentage of investment in government securities were in increasing trend. The investment in aggregate in government securities are 5.97%, 22.53%, 27.91%, 32.91% and 16.24% in the fiscal year 058/59, 059/60, 060/61, 061/62 and 062/63 respectively. This data showed that the investment was in increasing trend but it was decreased to 16.24% in the fiscal year 062/63. the highest percentage of investment made on fixed deposits in commercial and development bank was 90.40% in the fiscal year 058/59. then after it was decreased by 71.95%, 60.96% and 54.77% in the fiscal year 059/60, 060/61 and 061/62 respectively. Later it was again rose to 67.90% in the fiscal year 062/63. in aggregate only few percentage out of total investment was made on fixed deposit in financial companies. The percentage of investment was made in between 0% to 5.35% of total investment. The bar diagram and table

shows that the ratio of investment in other sectors as miscellaneous investment was in increasing trend during the study period. The investment as miscellaneous varies from 2.98% to 10.50% out of total investment.

The average investment of 21.11%, 2.74% and 6.94% indicates the investment in government securities, fixed deposit in financial companies and investment as miscellaneous respectively. The calculated CV of 49.70% indicates that there was inconsistency in the investment made on government securities by life insurance companies in aggregate. It also revealed that the ratios of investment was not stable.

The calculated CV of 19.58% revealed that the ratios of investment in fixed deposits in commercial and development banks were nearly consistent and stable. The another calculated CV of 87.61% indicates the higher value of CV which means that there was highly inconsistency in investment made on fixed deposit in financial companies. The other calculated CV of 43.90% means there were inconsistency in the ratios of investment in miscellaneous sectors.

4.1.2.1 Comparison of Life Investment

Table 4.32

Comparison of Investment of RBS

(in Rupees)

Sectors	58/59	59/60	% Chg.	59/60	60/61
Government Securities	1200700000	1380800000	15	1380800000	1615500000
Fixed Investment in Commercial and Development Bank	4566600000	5251600000	15	5251600000	6142300000
Miscellaneous	5200000	5300000	1.92	5300000	9100000
Total	5772500000	6637700000	14.99	6637700000	7766900000

% Chg.	60/61	61/62	% Chg.	61/62	62/63	% Chg.
17	1615500000	1841700000	14	1841700000	2010800000	9.18
16.96	6142300000	7004600000	14.04	7004600000	7647800000	9.18
71.7	9100000	8000000	-12.09	8000000	8100000	1.25
17.01	7766900000	8854300000	14	8854300000	9666700000	9.17

The above table 4.32 revealed the comparison of investment of RBS during the study period. The percentage change in investment in government securities and fixed deposit at commercial and development bank were equal. There were increase or decrease in investment sectors by same percentage. The highest change in investment in government securities was 17% in the fiscal year 060/61 and decrease in investment in government securities as compare to other fiscal years was 9.18% in the fiscal year 062/63. The company had invested in fixed deposits at bank by 15% increment in the fiscal year 059/60. Thenafter it rose to 16.96% and again falls down to 14.04% and 9.18% in the fiscal year 060/61, 061/62 and 062/63 respectively. This means that investment in fixed deposits at commercial and development bank were in fluctuating trend.

As compared to other fiscal years the highest increment in the investment at government securities, fixed deposits at bank and miscellaneous were 17%, 16.96% and 71.7% respectively in the fiscal year 060/61. The increment in total investment was also in fluctuating trend. The company had decreased its investment as miscellaneous investment by -12.09% in the fiscal year 061/62 as compared to the fiscal year 060/61. The highest increment in investment in miscellaneous sector was 71.7% in the fiscal year 060/61.

Table 4.33
Comparison of Investment of NLGI

Sectors	58/59	59/60	% Chg.	59/60	60/61	% Chg.
Government Securities	71674932	191298436	166.9	191298436	174298436	-8.89
Fixed Investment in Commercial and Development Bank	715158000	709543000	-0.79	709543000	802203000	13.06
Fixed Investment in Financial Companies	0	0	0	0	72500000	∞
Miscellaneous	35500000	73000000	105.6	73000000	87445400	19.79
Total	822332932	973841436	18.42	973841436	1136446836	16.7

60/61	61/62	% Chg.	61/62	62/63	% Chg.
174298436	174298436	0	174298436	205605264	17.96
802203000	882959314	10.07	882959314	1041553139	17.96
72500000	67500000	-6.89	67500000	79624096	17.96
87445400	144223488	64.93	144223488	110299793	-23.52
1136446836	1268981238	11.66	1268981238	1437082292	13.25

The above table 4.33 revealed that the life fund invested by NLGI was in fluctuating trend. The highest increment in the investment of government saving bond was 166.90 % in the fiscal year 059/60 and the lowest was -8.89 % in the fiscal year 60/61. In the context of bank fixed deposits, the highest increment

17.96% in the fiscal year 062/63 and the lowest increment was -0.79% in the fiscal year 059/60. The company had invested in the financial companies since fiscal year 060/61. The highest increment was 17.96 % in the fiscal year 062/63 and the lowest increment was -6.897 % in the fiscal year 061/62.

The increment in the investment in other sectors was highest in the fiscal year 059/60 i.e 105.6% and the lowest increment was -23.52% in the fiscal year 062/63. the table also shows that the percentage increment in the investment in government securities, bank fixed deposits and investment in fixed deposit in finance was same in the fiscal year 062/63 ie. 17.96%. the table also revealed that the highest increment in total investment was 18.42% in the fiscal year 059/60 and lowest increment in total investment was 11.66% in the fiscal year 061/62.

Table 4.34
Comparison of Investment of NLIC

Sectors	58/59	59/60	% Chg.	59/60	60/61	% Chg.
Government securities	0	113025000	∞.	113025000	228198609	101.9
Fixed Investment in Commercial and Development Bank	180000000	352200000	95.67	352200000	455000000	29.19
Fixed Investment in Financial Companies	0	0		0	472000000	∞
Miscellaneous	0	0	∞	0	450000000	∞
Total	180000000	465225000	158.5	465225000	775398609	66.67

60/61	61/62	% Chg.	61/62	62/63	% Chg.	62/63	63/64	% Chg.
228198609	237360679	4.01	237360679	240569078	1.35	240569078	476001082	97.86
455000000	598200000	31.47	598200000	981000000	63.99	981000000	1209000000	23.24
472000000	0	-100	0	0	0	0	0	0
450000000	98266249	118.4	98266249	143333677	45.86	143333677	148156641	3.36
775398609	933826928	20.43	933826928	1364902755	46.16	1364902755	1833157723	34.30

According to table 4.34, the NLIC had invested Rs 180000000 only in bank fixed deposits in the fiscal year 058/59. the highest increment in the investment in government securities was 101.9% in the fiscal year 060/61 and lowest investment was 1.35% in the fiscal year 062/63. the table revealed that investment by NLIC in different sectors was fluctuating year by year. The highest increment in the investment in bank fixed deposits was 95.67% in the fiscal year 059/60 and lowest increment was 23.24% in the fiscal year 063/64. during the study period company had invested Rs 47200000 only at once in fixed deposits in financial companies. The company had also started to invest its fund in other sectors since in the fiscal year 060/61. the highest increment in the investment in other sectors as miscellaneous sectors was 118.4% in the fiscal year 061/62. thereafter increment in investment in miscellaneous sectors was decreased by 45.86% and 3.36% in the fiscal year 062/63 and 063/64 respectively. The increment in total investment was in decreasing trend. The highest increment in total investment was 158.5% in 059/60 and lowest increment in total investment was 20.43% in the fiscal year 061/62.

Table 4.35
Comparison of Investment of LIC

Sectors	58/59	59/60	% Chg.	59/60	60/61	% Chg.
Government Securities	0	98915476	0	98915476	128364913	29.77
Fixed Investment in Commercial and Development Bank	190000000	255029808	34.23	255029808	386529808	51.56
Fixed Investment in Financial Companies	7950000	0	-100	0	11500000	0
Miscellaneous	0	7950000	0	7950000	36450000	358.5
Total	197950000	361895284	82.82	361895284	562844721	55.53

60/61	61/62	% Chg.	61/62	62/63	% Chg.	62/63	63/64	% Chg.
128364913	140663495	9.58	140663495	140663495	0	140663495	403164913	186.62
386529808	605029808	56.53	605029808	864000000	42.8	864000000	1285500000	48.78
11500000	41400000	260	41400000	147900000	257.2	147900000	169400000	14.53
36450000	84850000	132.8	84850000	192750000	127.2	192750000	248005334	28.66
562844721	871943303	54.92	871943303	1345313495	54.29	1345313495	2106070247	56.54

The above table revealed the comparison of investment of LIC during the study period. The increment in investment in government securities lies between 0% to 186.62% .The investment of Rs 140663495 in government securities was neutral in the fiscal year 061/62 and 062/63. there was gradually increment in the investment made on fixed deposits in banks by 34.23%, 51.56% and 56.53% in the fiscal year 059/60, 060/61 and 061/62 respectively. Then after it was slightly decreased to 42.8% and 48.78% in the fiscal year 062/63 and 063/64 respectively. The company had invested Rs 7950000 in fixed deposits in financial companies in the fiscal year 058/59. But there was no any investment on financial companies in the fiscal year 059/60. the company again started to invest in fixed deposits in financial companies from the fiscal year 060/61. The highest increment in the investment in fixed deposits in financial sectors was around 260% in the fiscal

year 061/62 and 062/63. Later there was drastic falls in investment in financial companies in the fiscal year 063/64. the company had highest increment in the investment in miscellaneous sector was 358.5% in the fiscal year 060/61. the table shows that company had started to invest more funds in miscellaneous sectors from the fiscal year 060/61 as compare to previous fiscal year. The company had highest increment of 82.82% in total investment was made on the fiscal year 059/60. the increment in total investment in other fiscal years was average of 55%. The table also revealed that the LIC company have given more priority to invest in government securities in the fiscal year 063/64.

Table 4.36
Comparison of Investment of ALICO

Sectors	58/59	59/60	% Chg.	59/60	60/61	% Chg.
Government Securities	0	9050000	∞	9050000	221751138	2350
Fixed Investment in Commercial and Development Bank	0	0	0	0	0	0
Fixed Investment in Financial Companies	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Total	0	9050000	∞	9050000	221751138	2350

60/61	61/62	% Chg.	61/62	62/63	% Chg.
221751138	701181794	216.2	701181794	103463398	-85.24
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
221751138	701181794	216.2	701181794	103463398	-85.24

The above table 4.36 revealed that the comparison of the fund invested by ALICO in different sectors. The company did not have invested any of their funds in fixed deposits in banks, financial institutions and other sectors. The ALICO company

had invested its fund only in government securities since 059/60. The highest increment of investment in government securities was 2350% in the fiscal year 060/61. The calculated data exposed that the investment in government securities are more fluctuating during the study period. There was negative increment of -85.24% in the fiscal year 062/63. The highest amount invested in government securities was Rs 701181794 in the fiscal year 061/62. This table also revealed that the ALICO company had given priority to invest only in government securities.

Table 4.37
Comparison of Investment in Aggregate

Sectors	58/59	59/60	% Chg.	59/60	60/61	% Chg.
Government Securities	1272374932	1793088912	40.92	1793088912	2368113096	32.07
Fixed Investment in Banks and Finance Co.	5659708000	6568372808	16.05	6568372808	7917232808	20.54
Miscellaneous	40700000	86250000	111.9	86250000	177995400	106.4
Total	6972782932	8447711720	21.15	8447711720	10463341304	23.86

60/61	61/62	% Chg.	61/62	62/63	% Chg.
2368113096	3095204404	30.7	3095204404	2701101235	-12.7
7917232808	9199689122	16.2	9199689122	10761877235	16.98
177995400	335339737	88.4	335339737	454483470	35.53
10463341304	12630233263	20.71	12630233263	13917461940	10.19

The above table 4.37 revealed the comparison of investment pattern of life insurance companies in different sectors in aggregate. The trend of investment in aggregate in government was in decreasing trend. The increment of 40.97% in the fiscal year 059/60 was the highest increment in the investment in government securities by selected life insurance companies. The lowest increment in investment in government securities was negative increment of -12.7% in the

fiscal year 062/63. The average investment in fixed investment by life insurance companies was approximately 16% during the study period except in the fiscal year 060/61. The highest increment in the investment in miscellaneous sectors was 111.9% in the fiscal year 059/60 and lowest investment change was 35.53% in the fiscal year 062/63. The above table revealed that the investment pattern or change during the study period was in decreasing trend for the investment in government sectors and miscellaneous sectors. The investment made on fixed deposits during the fiscal years was nearly constant. There was fluctuation in changes in total investment during the study period. The highest increment in total investment was 23.86% and lowest increment was 10.19% in the fiscal year 060/61 and 062/63 respectively. The table also revealed that the investment in all sectors in the fiscal year 062/63 was gradually decreasing as compare to other fiscal years during the study period.

4.2 Investment Return

The increment in the stated investment plus tax is said to be an investment return. The investment rate of return is defined as the after tax increased in the value of the initial investment. The increase in value can come from two sources.

- a. Direct cash payment to the investor.
- b. An increase in the market value of the investment relating to the original purchase price.

Rate of return may be easy to understand but time horizon can make the computation complex. So it is necessary to examine how the rate of return is measured over different periods of time.

Profit is very important in any company. Insurance company also thinks about profit or return. It invests its fund in different sectors hoping for better return from

it. The ratio reveals which of the investment sector earning in respect of investment on these sectors.

$$\text{Return on Investment} = \frac{\text{Net Income}}{\text{Total Investment}}$$

The fund of Life Insurance Company is invested in government securities, fixed deposits at bank, financial institutions, share, debenture, short term investment, CIT etc. the return from the invested made on these sectors are tabulated and percentage of return, average return, standard deviation and coefficient of variation are calculated for the analysis of the study purpose. The return on life insurance companies are described as under except the return of RBS because of the unavailability of the data.

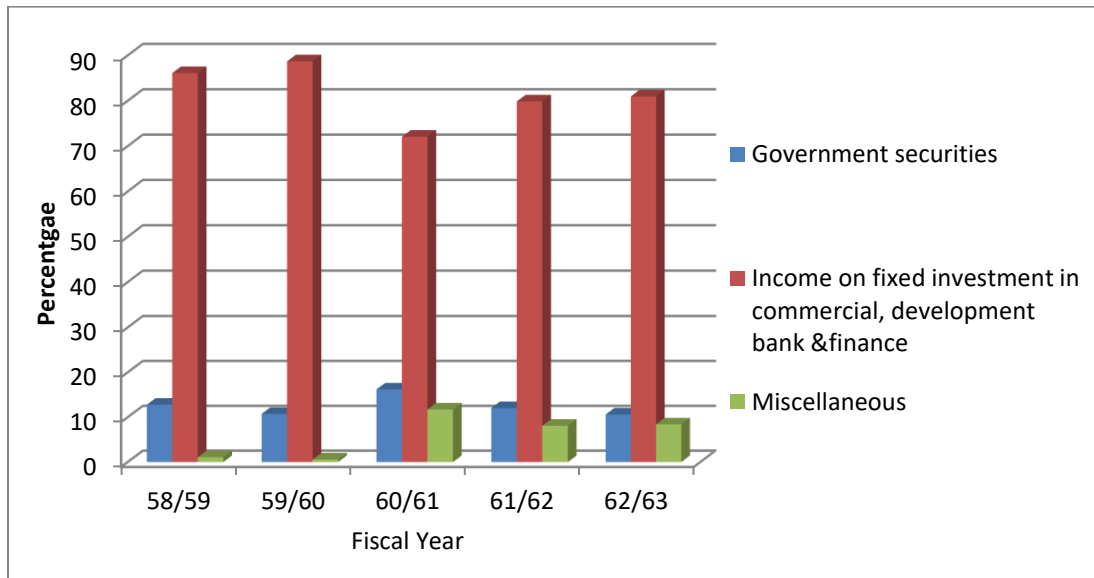
Table 4.38

Return on Investment in Different Sectors by NLGI (in %)

(Return on Investment of NLGI) fiscal year		58/59	59/60	60/61	61/62	62/63
Government Securities		12.79	10.73	16.19	12.04	10.61
Income on Fixed Investment in Commercial, Development Bank & Finance		86.12	88.7	72.08	79.86	80.98
Miscellaneous (Share, Debenture, CIT etc.)		1.09	0.57	11.72	8.1	8.41
Total		100	100	99.99	100	100
Average (%)	S.D.	C.V. (%)				
12.47	2.27	18.20				
81.54	6.42	7.87				
5.97	4.91	82.17				

Chart 4.27

Return on Investment in Different Sectors by NLGI (in %)



The above table 4.38 and chart 4.27 reveal the return on investment fund of NLGI in different sectors. The calculated returns on investment in government securities were somewhat fluctuating year to year. The highest return on investment in government securities was 16.19% out of total return in the fiscal year 060/61 and lowest return was 10.61% in the fiscal year 062/63. The average return on investment in government securities was 12.47%. The company had got highest return from the investment in fixed deposits in commercial and development bank. The highest return during the study period was 86.12% in the fiscal year 058/59 and lowest return was 72.08% in the fiscal year 060/61. The average return was 81.54% which indicates the highest return among the investment in different sectors. The return from investment in miscellaneous sectors was varied from 0.57% to 11.57% which indicates the return is fluctuating yearly. The low standard deviation of 2.27%, 6.42% and 4.91% in return of investment in government securities, bank fixed deposits and miscellaneous respectively indicates the total risk of the NLGI Company in the context of return is low. The calculated CV of return in investment in government securities was 18.20% which

indicates the ratios were little inconsistency. The calculated CV of investment in fixed deposits was 7.87% which revealed the ratio are nearly consistent. The high CV of 82.17% indicates the ratios of return on investment as miscellaneous were highly inconsistency and were not stable.

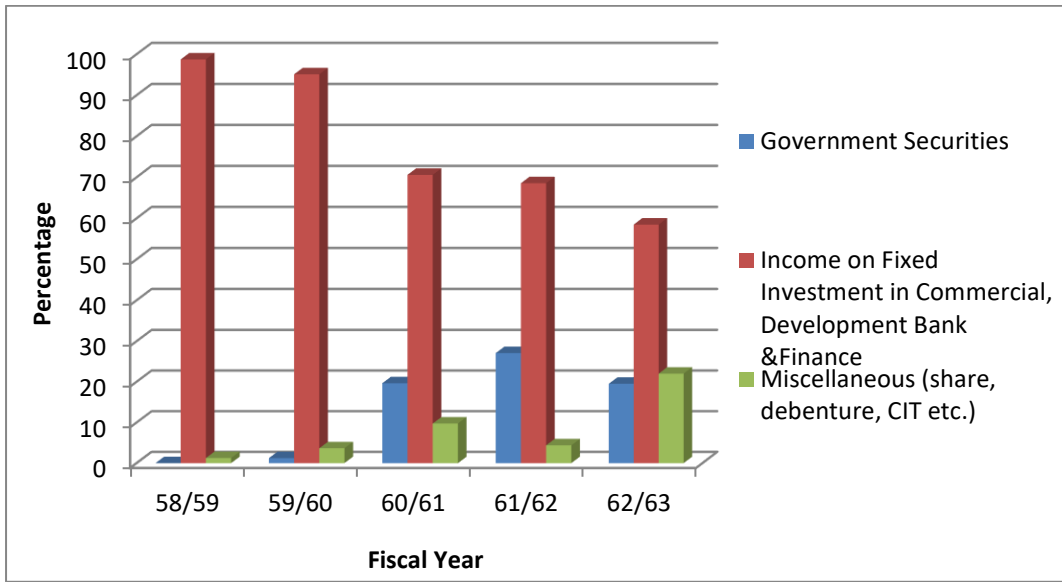
Table 4.39

Return on Investment in Different Sectors by NLIC (in %)

(Return on investment of NLIC)							
Fiscal year			58/59	59/60	60/61	61/62	62/63
Government Securities			0	1.22	19.66	27.07	19.52
Income on Fixed Investment in Commercial, Development Bank & Finance			98.74	95.11	70.59	68.55	58.46
Miscellaneous (Share, Debenture, CIT etc.)			1.25	3.66	9.75	4.37	22.02
Total			99.99	99.99	100	99.99	100
Average(%)	S.D.	C.V.(%)					
13.49	12.15	90.10					
78.29	17.66	22.56					
8.21	8.32	101.35					

Chart 4.28

Investment Return of NLIC



The above table 4.39 and bar diagram of the chart 4.28 revealed the return on the investment made by NLIC. The return on investment in government securities was in increasing trend. The highest percentage was 27.07% in the fiscal year 061/62. The return was in increasing trend up to the fiscal year 061/62, which was the highest percentage of return in investment in government securities. Thereafter the return percentage was declined to 19.52% in the fiscal year 062/63. The average of 13.49% represents the return on investment from government securities. But the calculated CV of 90.10% on investment return on government securities was very high. This high CV revealed that there was highly inconsistency of return and the ratios were not stable.

The return from investment in fixed deposits at banks and financial institutions were in decreasing trend. The bar diagram showed that the returns were decreasing from the fiscal year 058/59 till the study period (fiscal year 062/63). The company gets highest return of 98.74% from the investment as fixed deposit in the fiscal year 058/59 and the lowest return was 58.46% in the fiscal year 062/63. The calculated CV of return on investment in fixed deposits was 22.56%, which

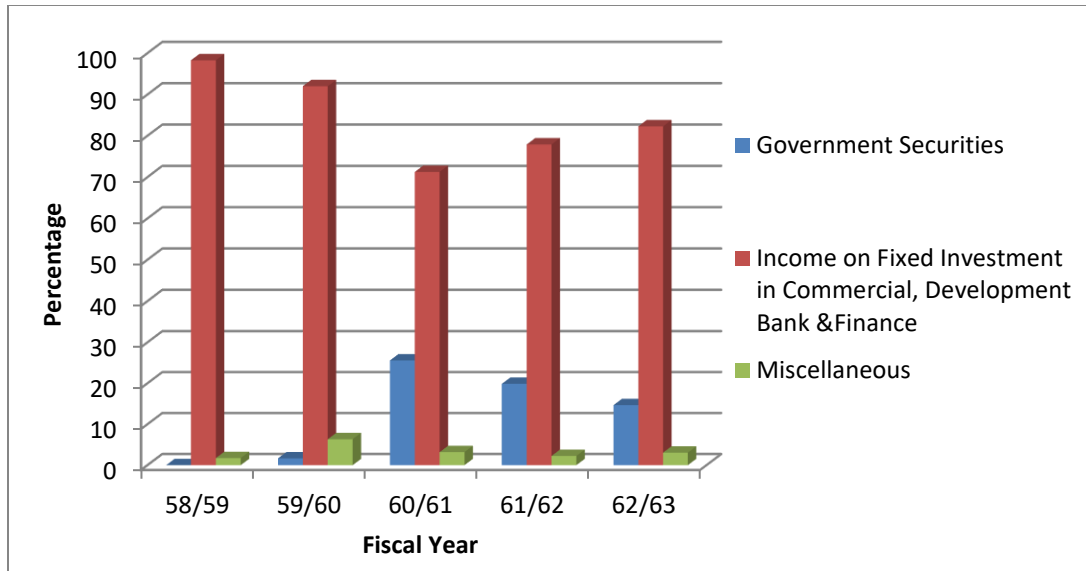
indicates that the ratios of return was little inconsistent. From the higher level of bar diagram we could say that company got the highest return from investment made in fixed deposit was in the fiscal year 058/59.

The return from investment as miscellaneous was in fluctuating trend. The ratios were varied from 1.25% to 22.02%. The company got the highest return in the fiscal year 062/63. The average return on investment as miscellaneous was 8.21%. The calculated CV was 101.35%, which was very high CV. This high CV indicates that per unit risk of the company was very high and there was inconsistency of return and the ratios were not stable.

Table 4.40
Return on Investment in Different Sectors by LIC (in %)

(Return On Investment Of LIC)								
Fiscal Year				58/59	59/60	60/61	61/62	62/63
Government Securities				0	1.67	25.56	19.86	14.66
Income on Fixed Investment In Commercial, Development Bank & Finance				98.27	92	71.25	77.9	82.28
Miscellaneous (Share, Debenture, CIT etc.)				1.73	6.33	3.18	2.24	3.05
Total				100	100	99.99	100	99.99
Average(%)	S.D.	C.V.(%)						
12.35	11.21	90.78						
84.34	10.83	12.84						
3.30	1.79	54.20						

Chart 4.29
Investment Return of LIC



According to table 4.40 and chart 4.29 mentioned above, the return on the investment made on government securities and fixed deposits were increasing to middle of the study period and decreasing after the middle of the study period and vice versa. The highest return on investment from government securities was 25.56% in the fiscal year 060/61. The table and graph shows that there were highly increments in the return on investment made in government securities in the fiscal year 060/61. The average return on investment in government securities was 12.35%. The 90.78% CV indicates inconsistency of its return.

The return on fixed deposits were 98.27%, 92% and 71.25% in the fiscal year 058/59, 059/60 and 060/61 respectively. These ratios from the table and bar diagram of the chart show that the return was in decreasing trend. The return after the fiscal year 060/61 was gradually increased to 77.9% and 82.8% in the fiscal year 061/62 and 062/63 respectively. This indicated that the return on fixed deposits were in increasing trend from the fiscal year 061/62. The average return on fixed deposits was 84.34%, which indicates that the company got the highest return from the investment made in fixed deposits. The calculated CV was

12.84%, indicate that the returns on fixed deposits were nearly consistent and ratios were almost stable.

The return from miscellaneous investment was fluctuating year to year. The return was varied from 1.73% to 6.33%. The average return on miscellaneous investment was 3.306%. The calculated CV 54.20% indicates that the return on investment was not consistent and the ratios were not stable.

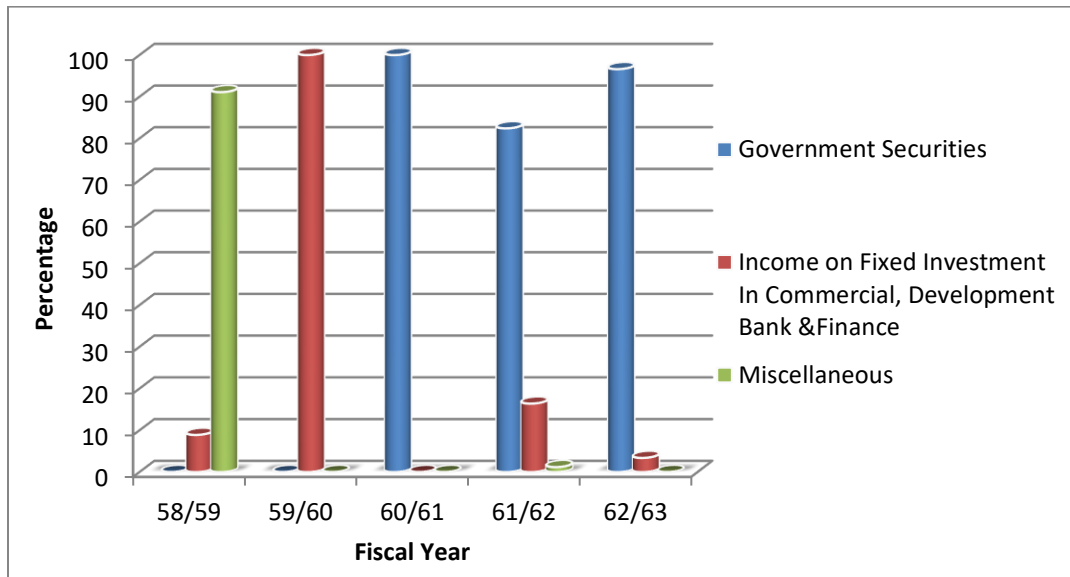
Table 4.41

Return on Investment in Different Sectors by ALICO (in %)

(Return on Investment of ALICO)							
Fiscal Year			58/59	59/60	60/61	61/62	62/63
Government Securities			0	0	100	82.41	96.62
Income on Fixed Investment In Commercial, Development Bank & Finance			8.89	100	0	16.39	3.38
Miscellaneous (Share, Debenture, CIT etc.)			91.1	0	0	1.19	0
Total			99.99	100	100	99.99	100
Average(%)	S.D.	C.V.(%)					
55.80	51.36	92.05					
25.73	41.97	163.13					
18.45	40.61	220.02					

Chart 4.30

Investment Return of ALICO



The above table 4.41 and chart 4.30 reveal the return on the investment made by ALICO. The company had got return on investment in government securities from the fiscal year 060/61. According to the table and bar diagram, it could be seen that the company got the highest return from the investment made on government

securities. The company get 100%, 82.41% and 86.6% return out of total return from investment made on government securities in the fiscal year 060/61, 061/62 and 062/63 respectively. The average return on investment in government securities was 55.80%. The calculated CV was 92.05%, indicate that the return was inconsistent and ratios were not stable.

The returns on fixed deposits were highly fluctuated during the study period. The average return was 25.73% and its standard deviation was 41.97 which means the company had high risk. The calculated CV was 163.11% which is very high, revealed that the return on fixed deposit is not significant and ratios are not stable. The company had invested as miscellaneous investment only in the fiscal year 058/59 and 061/62 during the study period. The company had got 91.10% and 1.19% return out of total return in the fiscal year 058/59 and 061/62 respectively. The calculated CV was 220.02%, which was very high. The high CV indicates that the company is suffering from per unit risk of the return. The returns on investment were not consistent and ratios were not stable.

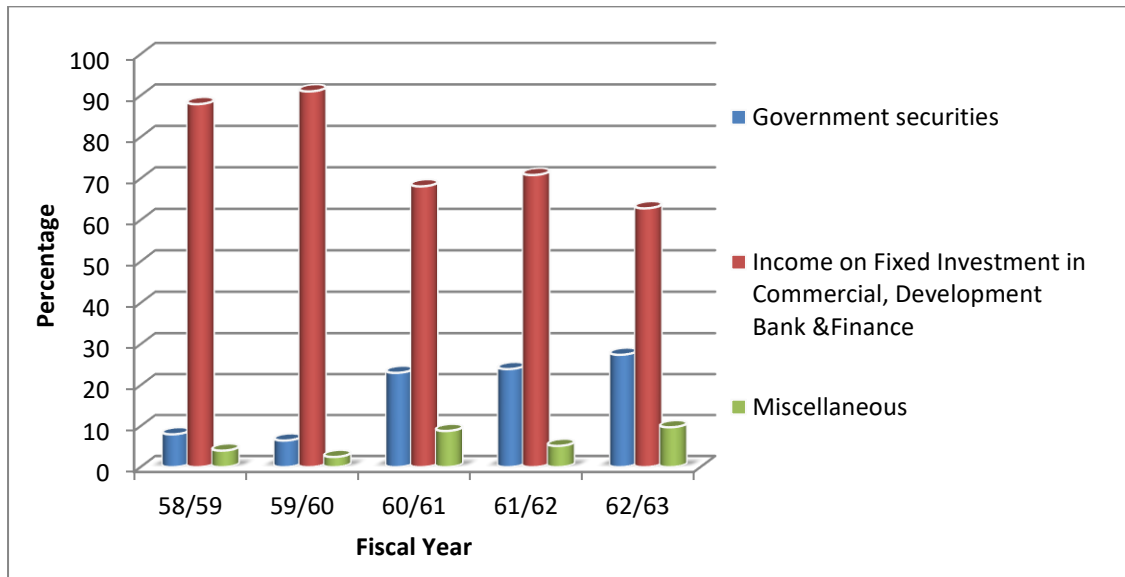
Table 4.42

**Return on Investment in Different Sectors by Selected Life Insurance
Company in Aggregate (in %)**

(Return on investment in average)			58/59	59/60	60/61	61/62	62/63
Fiscal year			58/59	59/60	60/61	61/62	62/63
Government securities			8.01	6.49	23.03	23.95	27.44
Income on Fixed Investment in Commercial, Development Bank & Finance			87.96	91.03	68.13	70.87	62.83
Miscellaneous (Share, Debenture, CIT etc.)			4.03	2.48	8.83	5.18	9.73
Total			100	100	99.99	100	100
Average(%)	S.D.	C.V.(%)					
17.78	9.77	54.94					
76.16	12.55	16.48					
6.05	3.11	51.51					

Chart 4.31

Investment Return in Aggregate



The above table 4.42 and bar diagram of the chart 4.31 represents the return on investment made on different sectors during the study period by selected life insurance company. The table and bar diagram revealed that the return on

investment in different sectors by life insurance companies was fluctuating year to year. The companies have get 27.44% return from investment in government securities in the fiscal year 062/63 and lowest return is 6.49% in the fiscal year 059/60. The average return on investment on government securities was 17.78%. The calculated CV was 54.94% which means that the returns on investment in government securities in aggregate are not consistent.

The table and chart revealed that life insurance companies have invested more of their funds in fixed deposits in banks and financial institutions. That's why they had got highest return from the fixed deposits. The average return on fixed deposits was 76.16% out of total return. The highest return on investment in fixed deposits was 91.03% in the fiscal year 059/60 and lowest return was 62.83% in the fiscal year 062/63. The lowest return was in the fiscal year 062/63 due to economic condition of the country. Its calculated CV was 16.48%, revealed that the return on fixed deposits in aggregate was nearly consistent.

The return from investment in miscellaneous sectors was fluctuating year to year. The company in aggregate get the highest return of 9.73% out of total return in the fiscal year 062/63 and the lowest return is 2.48% out of total return in 059/60. It yield average return on miscellaneous investment was 6.05% and CV is 51.51% indicates that the rates of return in aggregate investment by life insurance companies were not consistent and the ratios are not stable.

4.2.1 Comparison of Investment Return

Table 4.43

Comparison of Investment Return of NLGI

Return on Investment of NLGI/ fiscal year	58/59	59/60	%chg.	59/60	60/61	%chg.
Government Securities	6891000	6231000	-9.57771	6231000	11489334	84.38
Income on Fixed Investment	46379276	51509471	11.0614	51509471	51144212	-0.70
Miscellaneous	582990	325634	-44.1442	325634	8312622	2452.75
Total	53853266	58066105	7.822811	58066105	70946168	22.18

60/61	61/62	%chg.	61/62	62/63	%chg.
11489334	9499750	-17.31	9499750	9499750	0
51144212	62982124	23.14	62982124	72515602	15.13
8312622	6390817	-23.11	6390817	7526581	17.77
70946168	78872691	11.17	78872691	89541933	13.52

The above table 4.43 revealed that the return on investment made by NLGI during the study period was in fluctuating trend. The highest increment in the return on investment in government securities was 84.38% in the fiscal year 060/61 and the lowest was -9.57 % in the fiscal year 059/60. There was not any change on return on the investment in government securities during the fiscal year 061/62 and 062/63. The table show that the percentage change in return on government securites is -9.57% and-17.31% in the fiscal year 059/60 and 061/62 respectively. In the context of bank fixed deposits and fixed deposits in financial company, the highest increment in return was 23.14% in the fiscal year 061/62 and the lowest increment was-0.70% in the fiscal year 060/61.

The increment in the return from investment in other sectors was highest in the fiscal year 060/61 i.e 2452.75% and the lowest increment in return was -44.14% in the fiscal year 059/60.The table also revealed that the highest increment in

total return on total investment was 22.18% in the fiscal year 060/61 and lowest increment in total return on total investment was 7.82% in the fiscal year 059/60. The companies return on investment in government securities and miscellaneous sectors was not satisfactory in the fiscal year 059/60 and 061/62.

Table 4.44
Comparison of Investment Return of NLIC

Return on investment of NLIC/ fiscal year	058/59	59/60	%chg.	59/60	60/61	%chg.
Government securities	0	313528	∞	313528	7629188	2333.33
Income on fixed investment.	16255176	24380505	49.98	24380505	27391577	12.35
Miscellaneous	206427	937638	354.22	937638	3784662	303.63
Total	16461603	25631671	55.70	25631671	38805427	51.39

60/61	61/62	%chg.	61/62	62/63	%chg.
7629188	14994880	96.54	14994880	14715473	-1.86
27391577	37963785	38.59	37963785	44067641	16.07
3784662	2421661	-36.01	2421661	16597677	585.38
38805427	55380326	42.71	55380326	75380791	36.11

According to table 4.44, the NLIC had got highest increment in the return on investment in government securities by 2333.33% in the fiscal year 060/61, which was highest increment in the return on investment during the study period. The table revealed that return on the investment by NLIC in different sectors was fluctuating year to year. The highest increment in the return of investment in bank fixed deposits and finance company fixed deposits was 49.98% in the fiscal year 059/60 and lowest increment in return was 12.35% in the fiscal year 060/61. During the study period the company had got return from investment in other sectors also. The highest increment in the return on investment in other sectors as miscellaneous sectors was 585.38% in the fiscal year 062/63. The table showed

that the increment in return on investment in miscellaneous sectors was satisfactory during the study period except in the fiscal year 061/62 due to negative increment of -36.01%.

The increment in return on total investment was in decreasing trend. The highest increment in total return on total investment was 55.70% in 059/60 and lowest increment in total return on total investment was 36.11% in the fiscal year 062/63. The total return on total investment was in decreasing trend because of unstable situation of the country.

Table 4.45
Comparison of Investment Return of LIC

Return on investment of LIC/ Fiscal Year	058/59	59/60	%chg.	59/60	60/61	%chg.
Government Securities	0	359272	0	359272	8089755	2151.70
Income on Fixed Investment	12734107	19893482	56.22	19893482	22555142	13.37
Miscellaneous	223550	1369905	512.79	1369905	1007458	-26.45
Total	12957657	21622659	66.87	21622659	31652355	46.38

60/61	61/62	%chg.	61/62	62/63	%chg.
8089755	8227218	1.69	8227218	8851343	7.58
22555142	32268943	43.06	32268943	49680007	53.95
1007458	928420	-7.84	928420	1841855	98.38
31652355	41424581	30.87	41424581	60373205	45.74

The above table 4.45 revealed the comparison of investment return of LIC during the study period. The increment in investment return from investment in government securities lies between 0% to 2151.7% .The highest investment return on government securities was 2151.7% in the fiscal year 060/61. The investment

return on the investment made by LIC in different sectors was fluctuating year to year. The highest return on the investment made on fixed deposits in banks was 56.22% in the fiscal year 059/60 and lowest return was 13.37% in the fiscal year 060/61. company had invested Rs 7950000 in fixed deposits in financial companies in the fiscal year 058/59. The company had highest increment in return in the investment in miscellaneous sector was 512.79% in the fiscal year 059/60. The company had negative changes of -26.45% and -7.84% in the fiscal year 060/61 and 061/62 respectively in return on investment in miscellaneous sectors. The company had highest increment in return of 66.87% in total investment in the fiscal year 059/60. The lowest increment in total return in total investment was 30.87% in fiscal year 061/62. The table also revealed that the LIC company have fluctuating total return during the study period. The company had got highest return from the investment made in fixed deposits at bank and finance companies.

Table 4.46

Comparison of Investment Return of ALICO

Return on Investment of ALICO/ Fiscal Year	58/59	59/60	%chg.	59/60	60/61	%chg.
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Government Securities	0	0	0	0	6977961	0
Income on Fixed Investment	239143	995080	316.10	995080	0	-100
Miscellaneous	2449670	0	-100	0	0	0
Total	2688813	995080	-62.99	995080	6977961	601.24

60/61	61/62	%chg.	61/62	62/63	%chg.
6977961	13191749	89.04	13191749	40193240	204.68
0	2624420	0	2624420	1407021	-46.38
0	190853	0	190853	0	-100
6977961	16007022	129.39	16007022	41600261	159.88

The above table 4.46 revealed that the comparison of the return on fund invested by ALICO in different sectors. The company had got Rs 6977961 return from the investment in government in the fiscal year 060/61. The company had got highest return from the investment in government sectors was 204.68% in the fiscal year 062/63. The table showed that the increment in the returns from investment in government securities were in increasing trend. According to data availability and calculation in the above table, the company have highest increment in return from investment in fixed deposits in banks and financial companies was 316.10%.

The company had got Rs 2449670 and Rs190853 from the investment in miscellaneous sectors in the fiscal year 058/59. And 061/62. The company did not have return from miscellaneous investment except in the fiscal year 058/59 and 061/62 during the study period. The ratio of percentage change in total return from total investment was fluctuating year to year. There was negative change of -62.99% in the fiscal year 059/60. The highest increment in the total return from the total investment during the study period was 601.24% in the fiscal year 060/61. There were increment in the total return from total investment from the fiscal year 060/61 as compare to previous fiscal years.

Table 4.47**Comparison of Investment Return in Aggregate**

Return on investment / fiscal year	058/59	59/60	%chg.	59/60	60/61	%chg.
Government securities	6891000	6903800	0.18	6903800	34186238	395.18
Income on Fixed Investment	75607702	96778538	28.00	96778538	101090931	4.45
Miscellaneous	3462637	2633177	-23.95	2633177	13104742	397.67
Total	85961339	106315515	23.67	106315515	148381911	39.56

60/61	61/62	%change	61/62	62/63	%change
34186238	45913597	34.30	45913597	73259806	59.56
101090931	135839272	34.37	135839272	167670271	23.43
13104742	9931751	-24.21	9931751	25966113	161.44
148381911	191684620	29.18	191684620	266896190	39.23

As per above table 4.47 the return on investment in aggregate can be studied clearly. The highest increment in return from the investment made by life insurance companies in government securities was 395.18% in the fiscal year 060/61. In aggregate there was only 0.18% increment in total return from the investment in government securities in the fiscal year 059/60. According to above table, the highest increment in the return among the all investment sectors was from the investment in government securities. The return from the investment in different sectors by different life insurance companies were in fluctuating trend. The increase in income from fixed investment was 34.37% in the fiscal year 061/62, highest during the study period. The lowest rise in return from fixed investment was 4.45% in the fiscal year 060/61. In aggregate the return from investment in miscellaneous sectors was -23.95% and -24.21% in the fiscal year 059/60 and 061/62 respectively. These negative increments are not satisfactory

during the study period. The highest return in aggregate from investment in miscellaneous sectors was 397.67%. In average, the life insurance companies has got approximately 40% total return from total investment in the fiscal year 060/61 and 062/63. The average return from total investment in other fiscal years was approximately 26%. In conclusion we conclude that the returns from investment in different sectors were fluctuating during the study period.

4.3 Statistical Analysis

Under this chapter various statistical calculation was studied which were related to decision making for premium collection and investment pattern. The trend analysis, coefficient of correlation and 'F' Test were used for the purpose to find out tendency, relation and distinguish between premium collection, investment and investment return. For this purpose following measures were analyzed.

4.3.1 Correlation Analysis

In this analysis product moment method has been used to find out the relationship between premium collection & investment, premium collection & claims paid and investment & investment return. Generally, the correlation analysis is used to describe the degree to which one variable related to another. Hence, in statistics, it is used in order to depict the co-variation between two or more variables. It helps to determine whether,

- a) A positive or a negative relationship exists.
- b) The relationship is significant or insignificant and
- c) Establishes causes and effect relationship if any.

The statistical tools, correlation analysis is preferred in this study to identify the relationship between premium and investment, whether the relationship is

significant or not. For the purpose of decision making under correlation, decision – maker based on following interpretation terms.

- a) When $r = +1$, there is perfect positive correlation.
- b) When, $r = -1$, there is perfect negative correlation.
- c) When $r = 0$, there is no correlation.
- d) When ‘r’ lies in between 0.7 to 0.999, (-0.7 to -0.999), there is a high degree of positive, (or negative) correlation.
- e) When ‘r’ lies 0.5 to 0.6999 there is a moderate degree of correlation.
- f) When ‘r’ is less than 0.5 there is low degree of correlation.

4.3.1.1 Correlation between Premium Collection and Investment

The correlation between premium collection and investment of life insurance companies revealed the solution of the question: was there any relationship between the premium collection and their investment? In other word was more premium collection means more investment by them ? If there is relationship between these two variables, what relationship existed, positive or negative relationship?

Table 4.48

Correlation of Premium Collection and Investment of RBS

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.63	Moderate degree of positive correlation	0.39	0.18	1.09	Insignificant

From the above computation and table 4.48, we can draw the conclusion that there is moderate degree of positive co-relation between the premium collection by RBS and its investment. That reveals average premium collection means average investment.

Again, the coefficient of determination (R^2) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of RBS, the coefficient of determination is 0.3976, which means that the variation in independent variable (premium collection) explains 39.76% of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is less than the 6 P.E. (r), therefore we conclude that the relation between the two variables is not significant.

Table 4.49

Correlation of Premium Collection and Investment of NLGI

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.95	High degree of positive correlation.	0.91	0.026	0.16	Highly significant

From the above computation and table 4.49, we can draw the conclusion that there is high degree of positive co-relation between the premium collection by NLGI and its investment. That reveals more premium collection means more investment.

Again, the coefficient of determination (R^2) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of NLGI, the coefficient of determination is 0.9109, which means that the variation in independent variable (premium collection) explains 91.09 % of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r), therefore we conclude that the relation between the two variables is highly significant.

Table 4.50

Correlation of Premium Collection and Investment of NLIC

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.98	High degree of positive relationship.	0.97	0.007	0.044	Highly significant.

From the above computation and table 4.50, we can draw the conclusion that there is higher degree of positive relationship between the premium collection by NLIC and its investment. That reveals more premium collection means more investment.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of NLIC, the coefficient of determination is 0.9752, which means that the variation in independent variable (premium collection) explains 97.52% of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r), therefore we conclude that the relation between the two variables is highly significant.

Table 4.51

Correlation of Premium Collection and Investment of LIC

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.98	Higher degree of positive relationship	0.97	0.007	0.047	Highly significant.

From the above computation and table 4.51, we can draw the conclusion that there is higher degree of positive relationship between the premium collection by LIC and its investment. That reveals more premium collection means more investment.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of LIC, the coefficient of determination is 0.9737, which means that the variation in independent variable (premium collection) explains 97.37% of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r), therefore we conclude that the relation between the two variables is highly significant.

Table 4.52

Correlation of Premium Collection and Investment of ALICO

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.44	Low degree of positive relationship	0.19	0.24	1.45	Highly insignificant.

From the above computation and table 4.52, we can draw the conclusion that there is lower degree of positive relationship between the premium collection by ALICO and its investment. That reveals more premium collection does not mean more investment.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of ALICO, the coefficient of determination is 0.1958, which means that the variation in independent variable (premium collection) explains 19.58% of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is less than the 6 P.E. (r), therefore we conclude that the relation between the two variables is highly insignificant.

Table 4.53

Correlation of Premium Collection and Investment in Aggregate

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.99	Higher degree of positive relationship.	0.98	0.004	0.027	Highly significant.

From the above computation and table 4.53, we can draw the conclusion that there is higher degree of positive relationship between the premium collection by life insurance companies in aggregate and its investment. That reveals more premium collection means more investment.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other is independent. In case of life insurance companies in aggregate, the coefficient of determination is 0.9846, which means that the variation in independent variable (premium collection) explains 98.46% of variations in dependent variable (investment).

Probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and investment is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r), therefore we conclude that the relation between the two variables is highly significant.

4.3.1.2 Correlation between Premium Collection and Claims Paid

Was there any relationship between premium collection by life insurance companies and claims paid by them? If yes, what relationship existed between these two factors positive or negative relationship? What was the degree of relationship? The correlation between premium collection by life insurance companies and claims paid by them got solution of these entire questions.

Table 4.54

Correlation between Premium Collection and Claims Paid of NLGI

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.87	Higher degree of positive relationship	0.76	0.071	0.43	Significant

From the above computation table 4.54, we can conclude that there is higher degree of positive relationship between premium collection and claim paid of NLGI. It reveals that more premium collection means more claim paid.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of which is the dependent variable and other is independent. In case of NLGI, coefficient of determination is 0.7616, which means that the variation in independent variable (premium collection) explains 76.16 % of the variation in dependent variable (claims paid).

Generally, probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and claims paid is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r) therefore we conclude that the relation between the two variables is significant.

Table 4.55

Correlation between Premium Collection and Claims Paid of NLIC

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E.(r)	Significant or Insignificant
0.69	Moderate degree of positive relationship	0.48	0.15	0.93	Insignificant

From the above computation table 4.55, we can conclude that there is moderate degree of positive relationship between premium collection and claim paid of NLIC. It reveals that average premium collection means average claim paid.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of which is the dependent variable and other is independent. In case of NLIC, coefficient of determination is 0.4814, which means that the variation in independent variable (premium collection) explains 48.14 % of the variation in dependent variable (claims paid).

Generally, probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and claims paid is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is less than the 6 P.E. (r) therefore we conclude that the relation between the two variables is insignificant.

Table 4.56

Correlation between Premium Collection and Claims Paid of LIC

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.94	Higher degree of positive relationship.	0.88	0.034	0.20	Significant

From the above computation table 4.56, we can conclude that there is higher degree of positive relationship between premium collection and claim paid of LIC. It reveals that more premium collection means more claim paid.

Again, the coefficient of determination (R^2) is the measure of the degree of linear association or correlation between two variables, one of which is the dependent variable and other is independent. In case of LIC, coefficient of determination is 0.8858, which means that the variation in independent variable (premium collection) explains 88.58 % of the variation in dependent variable (claims paid).

Generally, probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and claims paid is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r) therefore we conclude that the relation between the two variables is significant.

Table 4.57

Correlation between Premium Collection and Claims Paid of ALICO

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.95	Higher degree of positive relationship.	0.91	0.025	0.15	Significant

From the above computation table 4.57, we can conclude that there is higher degree of positive relationship between premium collection and claim paid of ALICO. It reveals that more premium collection means more claim paid.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of which is the dependent variable and other is independent. In case of ALICO, coefficient of determination is 0.9142, which means that the variation in independent variable (premium collection) explains 91.42 % of the variation in dependent variable (claims paid).

Generally, probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and claims paid is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r) therefore we conclude that the relation between the two variables is significant.

Table 4.58

Correlation between Premium Collection and Claims Paid in Aggregate

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.96	Higher degree of positive correlation.	0.92	0.023	0.14	Significant

From the above computation table 4.58, we can conclude that there is higher degree of positive relationship between premium collection and claims paid by all life insurance companies except RBS. It reveals that more premium collection means more claim paid.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of which is the dependent variable and other is independent. In case of life insurance companies in aggregate, coefficient of determination is 0.9216, which means that the variation in independent variable (premium collection) explains 92.16 % of the variation in dependent variable (claims paid).

Generally, probable error is used to measure the significance of the relation between two variables. In case of this study the significance relationship between premium collection and claims paid is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 P.E. (r) therefore we conclude that the relation between the two variables is significant.

4.3.1.3 Correlation between Investment and Investment Return

As insurance company is also a financial institution, it always operates for profit motive. So, insurance companies mobilize its fund in those sectors that yield return. In the context of life insurance companies except RBS, it is not different than other non life insurance company. It collects fund in form of premium and invests in different sectors. The questions arise was there relationship between investment and investment return? In other words if life insurance companies invest more fund then they got more return? If relationship between them exists, what relationship is existed positive or a negative relationship? What is the degree of relationship? The correlation between investment and investment return of different life insurance companies are expressed below:

Table 4.59

Correlation between Investment and Investment Return of NLGI

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.99	Higher degree of positive relationship.	0.98	0.004	0.027	Highly significant.

From the above computation and table 4.59, it was clear that there is higher degree of positive relationship between investment and investment return of NLGI. It says that more investment means more net income or investment return.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other, is independent. In case of NLGI, the coefficient of determination is 0.9850, which means that the variation in independent variable (investment) explains 98.50 % of the variation in dependent variable (net profit or investment return).

Generally, probable error is used to measure the significance of the relation between two variables. In the case of this study the significance relationship between investment and net income is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the $6 * P.E. (r)$, therefore we conclude that the relation between the two variables is highly significant.

Table 4.60

Correlation between Investment and Investment Return of NLIC

Coefficient of Correlation (r)	Relationship	R^2	Probable Error P.E. (r)	$6 * P.E. (r)$	Significant or Insignificant
0.98	Higher degree of positive relationship.	0.97	0.007	0.043	Highly significant.

From the above computation and table 4.60, it was clear that there is higher degree of positive relationship between investment and investment return of NLIC. It says that more investment means more net income or investment return.

Again, the coefficient of determination (R^2) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other, is independent. In case of NLIC, the coefficient of determination is 0.9757, which means that the variation in independent variable (investment) explains 97.57 % of the variation in dependent variable (net profit or investment return).

Generally, probable error is used to measure the significance of the relation between two variables. In the case of this study the significance relationship between investment and net income is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the $6 * P.E. (r)$, therefore we conclude that the relation between the two variables is highly significant.

Table 4.61

Correlation between Investment and Investment Return of LIC

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.99	Higher degree of positive relationship.	0.99	0.0019	0.011	Highly significant.

From the above computation and table 4.61, it was clear that there is higher degree of positive relationship between investment and investment return of LIC. It says that more investment means more net income or investment return.

Again, the coefficient of determination (R^2) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other, is independent. In case of LIC, the coefficient of determination is 0.9935, which means that the variation in independent variable (investment) explains 99.35 % of the variation in dependent variable (net profit or investment return).

Generally, probable error is used to measure the significance of the relation between two variables. In the case of this study the significance relationship between investment and net income is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 *P.E. (r), therefore we conclude that the relation between the two variables is highly significant.

Table 4.62

Correlation between Investment and Investment Return of ALICO

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.15	Lower degree of positive relationship.	0.023	0.29	1.76	Highly insignificant.

From the above computation and table 4.62, it was clear that there is lower degree of positive relationship between investment and investment return of ALICO. It says that more investment does not mean more net income or investment return.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other, is independent. In case of ALICO, the coefficient of determination is 0.02316, which means that the variation in independent variable (investment) explains 2.316 % of the variation in dependent variable (net profit or investment return).

Generally, probable error is used to measure the significance of the relation between two variables. In the case of this study the significance relationship between investment and net income is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is less than the 6 *P.E. (r), therefore we conclude that the relation between the two variables is highly insignificant.

Table 4.63

Correlation between Investment and Investment Return in Aggregate

Coefficient of Correlation (r)	Relationship	R ²	Probable Error P.E. (r)	6*P.E. (r)	Significant or Insignificant
0.96	Higher degree of positive correlation.	0.92	0.021	0.12	Significant

From the above computation and table 4.63, it was clear that there is higher degree of positive correlation or relationship between investment and investment return of selected life insurance companies except RBS. It says that more investment means more net income or investment return.

Again, the coefficient of determination (R²) is the measure of the degree of linear association or correlation between two variables, one of, which is the dependent variable and other, is independent. In case of life insurance companies in aggregate, the coefficient of determination is 0.9282, which means that the variation in independent variable (investment) explains 92.82 % of the variation in dependent variable (net profit or investment return).

Generally, probable error is used to measure the significance of the relation between two variables. In the case of this study the significance relationship between investment and net income is measured by calculating probable error of correlation of coefficient. Since the co-efficient of correlation (r) is greater than the 6 *P.E. (r), therefore we conclude that the relation between the two variables is significant.

4.4 F- Test (ANOVA)

In testing hypothesis, we examine, on the basis of statistics, computed from the sample drawn, whether the sample drawn belongs to the parent population with

certain specified characteristics or not. In this study, an effort had been made to test the significance regarding premium collection and investment pattern of life insurance companies in the context of Nepal. The data of all life insurance companies are used to test the hypothesis.

In this test of hypothesis, F-statistic is used. The ratio of two independent chi-square variates divided by their respective degrees of freedom is known as F-statistic and the distribution of F-statistic is called the Fisher's F distribution. The range of the values of F is from 0 to infinity. The value of F cannot be negative since both terms of the F-ratio are squared values. The testing of hypothesis of equality between two means, t-test is applied. But when need to test the homogeneity of several means; the analysis of variance (ANOVA) is a powerful statistical tool for test of significance to evaluate differences among the parameters of several groups. In other words, analysis of variance (ANOVA) is a statistical technique specially designed to test whether the means of more than two quantitative populations are equal. The analysis of variance consists of classifying and cross-classifying statistical results and testing whether the means of a specified classification differ significantly.

Assumption of ANOVA:

1. The population of each sample must be normally distributed with same mean and variance.
2. All sample observations must be randomly selected, and independent.
3. Various treatment and environmental effects are additive in nature.

Generally, following steps are followed for the test of hypothesis, ANOVA in two way classification.

Formulating Hypothesis

- Null hypothesis
- Alternative hypothesis
- Computing the test statistic
- Fixing the level of significance
- Making Decision

4.4.1 F-test (ANOVA) for Total Investment Made by Different Life Insurance Companies in Five Years Period

Null Hypothesis

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$. That is, there is no significant difference in the total investment made in different periods (Fiscal Years).

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$. That is, there is no significant difference in the total investment made by different life insurance companies.

Alternative Hypothesis

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$. That is, there is significant difference in the total investment made in different periods (Fiscal Years).

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$. That is, there is significant difference in the total investment made by different life insurance companies.

Where, A,B,C,D & E indicates the fiscal year from 058/59 to 062/63 respectively. Similarly 1,2,3,4& 5 indicates the name of the life insurance companies, i.e. RBS, NLGI,NLIC,LIC & ALICO respectively.

Table 4.64
Total Investment

(Amount in Rupees)

Insurance Companies/ Fiscal Year	58/59 (A)	59/60 (B)	60/61 (C)	61/62 (D)	62/63 (E)
RBS (1)	5772500000	6637000000	7769000000	8854300000	9666700000
NLGI (2)	822332932	973841436	1136446836	1268981238	1437082292
NLIC (3)	1800000000	465225000	775398609	933826928	1364902755
LIC (4)	197950000	361895284	562844721	871943303	1345313495
ALICO (5)	0	9050000	221751138	701181794	103463398

Computation of Test Statistic:

Under H_0 , the test statistic is

$$F_c = \frac{MSC}{MSE} \quad \& \quad F_r = \frac{MSR}{MSE}$$

Where,

MSC = Mean sum of squares of variation between different fiscal years.

MSR = Mean sum of squares of variation between different life insurance companies.

MSE = Mean sum of squares of variation due to error.

In order to find MSC, MSR and MSE, we need to find SST, SSC, SSR, and SSE.

Where,

SST = Total sum of squares of variations.

SST = RSS – CF, where

RSS = Row sum of squares

$$RSS = \sum X_A^2 + \sum X_B^2 + \sum X_C^2 + \sum X_D^2 + \sum X_E^2$$

CF = Correction Factor

$$CF = \frac{T^2}{n}$$

Where T = Grand Total

$$T = TX_A + TX_B + TX_C + TX_D + TX_E$$

$$\text{Or } T = \sum T_c = \sum T_r$$

Where T_c and T_r represents the sum total of each column and row respectively.

$n = rc$ ie. Row x Column

SSC = Total sum of squares of variations between columns.

$$SSC = \frac{\sum T_c^2}{n_r - CF}$$

Where n_r = total number elements in row.

SSR = Total sum of squares of variation between rows

$$SSR = \frac{\sum T_r^2}{n_c - CF}$$

Where n_c = total number of elements in column.

Finally, total sum of squares due to error can be calculated by using following formula.

$$SSE = SST - SSC - SSR$$

Table 4.65

Two way ANOVA table

Sources of Variation	Sum of Squares	d.f.	Mean sum of squares	F-ratio
Between Fiscal Years	SSC = 2169.688	$c-1 = 5-1 = 4$	MSC = $SSC/(c-1)$ = 542.422	$F_c(4,16)$ = 1.5989
Between Companies	SSR = 8171.24	$r-1 = 5-1 = 4$	MSR = $SSR/(r-1)$ = 2042.81	$F_r(4,16)$ = 6.0217
Residual or Error	SSE = 5427.81	$(c-1)(r-1)$ = $4*4 = 16$	MSE = $SSE/(c-1)(r-1)$ = 339.238	
Total	SST = 15768.75	$n-1 = rc-1$ = $25-1 = 24$		

Total number of degrees of freedom (d.f) = $n-1 = rc-1$

Where,

r = number of rows

c = number of columns

$c-1$ = number of degrees of freedom between columns.

$r-1$ = number of degrees of freedom between rows

$(c-1)(r-1)$ = number of degrees for residual

$F_{\alpha}(x,y)$ = Find tabulated values.

Here $\alpha = 5\%$ (standard)

For investment in fiscal years: Tabulated $F_{0.05}(4, 16) = 3.01$

For investment made by different companies: Tabulated $F_{0.05}(4, 16) = 3.01$

Decision

For Total Investment in Different Periods (fiscal years):

Since calculated $F_c(4, 16)$ i.e. 1.5989 < tabulated $F_{0.05}(4, 16)$ i.e. 3.01, it is not significant and H_0 is accepted and H_1 is rejected, which means that there is no significant difference in the total investment made in different periods (fiscal years).

For Total Investment Made by Different Life Insurance Companies:

Since calculated $F_r(4, 16)$ i.e. 6.0217 > tabulated $F_{0.05}(4, 16)$ i.e. 3.01, it is significant and H_0 is rejected and H_1 is accepted which means that there is significant differences in total investment made by different life insurance companies.

4.4.2 F-test (ANOVA) for Total Premium Collection Made by Different Life Insurance Companies in Five Years Period

Null Hypothesis

$H_0: \mu_A = \mu_B = \mu_C = \mu_D = \mu_E$. That is, there is no significant difference in the total premium collection made by different life insurance companies.

$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$. That is, there is no significant difference in total premium collection made in different periods (fiscal years).

Alternative Hypothesis

$H_1: \mu_A \neq \mu_B \neq \mu_C \neq \mu_D \neq \mu_E$. That is, there is significant difference in the total premium collection made by different life insurance companies.

$H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$. That is, there is no significant difference in total premium collection made in different periods (fiscal years).

Where, A,B,C,D & E indicates the name of the life insurance companies, i.e. RBS, NLGI,NLIC,LIC & ALICO respectively. Similarly 1,2,3,4& 5 indicates the fiscal year from 058/59 to 062/63 respectively.

Table 4.66
Total Premium Collection

(Amount in Rupees)

Insurance Companies/ Fiscal Year	RBS (A)	NLGI (B)	NLIC (C)	LIC (D)	ALICO(E)
58/59 (1)	1153621700	236339069	86933787	42418710	11818526
59/60 (2)	1101195245	317820224	188419315	128260421	86558759
60/61 (3)	1257060118	306307890	331118729	266043183	330323727
61/62 (4)	1230978618	395700288	465642244	399041376	648157574
62/63 (5)	1207292218	435236908	576806744	542891527	967997716

Computation of Test Statistic

Under H_0 , the test statistic is

$$F_c = \frac{MSC}{MSE} \quad \& \quad F_r = \frac{MSR}{MSE}$$

Where,

MSC = Mean sum of squares of variation between different life insurance companies

MSR = Mean sum of squares of variation between different fiscal years.

MSE = Mean sum of squares of variation due to error.

In order to find MSC, MSR and MSE, we need to find SST, SSC, SSR, and SSE.

Where,

SST = Total sum of squares of variations.

SST = RSS – CF, where

RSS = Row sum of squares

$$RSS = \sum X_A^2 + \sum X_B^2 + \sum X_C^2 + \sum X_D^2 + \sum X_E^2$$

CF = Correction Factor

$$CF = \frac{T^2}{n}$$

Where T = Grand Total

$$T = TX_A + TX_B + TX_C + TX_D + TX_E$$

$$\text{Or } T = \sum T_c = \sum T_r$$

Where T_c and T_r represents the sum total of each column and row respectively.

$n = rc$ ie. Row x Column

SSC = Total sum of squares of variations between columns.

$$SSC = \frac{\sum T_c^2}{n_r - CF}$$

Where n_r = Total number elements in row.

SSR = Total sum of squares of variation between rows

$$SSR = \frac{\sum Tc^2}{n_c - CF}$$

Where n_c = Total number of elements in column.

Finally, total sum of squares due to error can be calculated by using following formula.

$$SSE = SST - SSC - SSR$$

Table 4.67
Two way ANOVA table

Sources of Variation	Sum of Squares	d.f.	Mean sum of squares	F-ratio
Between Companies	SSC = 294.7419	$c-1 = 5-1 = 4$	MSC = SSC/(c-1) = 73.6854	$F_c(4,16)$ = 35.0034
Between Fiscal Years	SSR = 66.228	$r-1 = 5-1 = 4$	MSR = SSR/(r-1) = 16.5570	$F_r(4,16)$ = 7.86522
Residual or Error	SSE = 33.6815	$(c-1)(r-1)$ = 4*4 = 16	MSE = SSE/(c-1)(r-1) = 2.1050	
Total	SST = 394.6516	$n-1 = rc-1$ = 25-1 = 24		

Total number of degrees of freedom (d.f) = $n-1 = rc-1$

Where,

r = number of rows

c = number of columns

$c-1$ = number of degrees of freedom between columns.

$r-1$ = number of degrees of freedom between rows

$(c-1)(r-1)$ = number of degrees for residual

$F_{\alpha}(x,y)$ = Find tabulated values.

Here $\alpha = 5\%$ (standard)

For investment in fiscal years: Tabulated $F_{0.05}(4, 16) = 3.01$

For investment made by different companies: Tabulated $F_{0.05}(4, 16) = 3.01$

Decision

For Total Premium Collection made by Different Life Insurance Companies

Since calculated $F_c(4, 16)$ i.e. 35.01 > tabulated $F_{0.05}(4, 16)$ i.e. 3.01, it is significant and H_0 is rejected and H_1 is accepted which means that there is significant differences in total premium collection made by different life insurance companies.

For Total Premium Collection made in Different Periods (fiscal year)

Since calculated $F_r(4, 16)$ i.e. 7.865 > tabulated $F_{0.05}(4, 16)$ i.e. 3.01, it is significant and H_0 is rejected and H_1 is accepted, which means that there is significant difference in the total premium collection made in different periods (fiscal years).

4.5 Major Findings

Life insurance business plays the great role in the national financial system. The growing numbers of insurance companies are competing with each other to attract policyholders with different types of insurance policies. In this regard life insurance companies of Nepal played vital role for socio-economic development within the nation either by transferring risks or by collecting scattered resources. In this study an attempt is made to provide independent view of the premium collection, investment position and investment return of life insurance companies in the context of Nepal. On the basis of study some findings and recommendation are identified. The position of premium collection, investment position and investment return of Nepalese life insurance companies have been already analyzed by using various financial and statistical tools. Based on the analysis some of the major findings are as follows.

1. First Life Premium to Total life Premium Collection of RBS

From the analysis we found that the company's ratio on first life premium to total life premium collection of RBS is almost in same level approximately 12%. The CV and SD are negligible which means that the result is significant and satisfactory. The CV also shows that there is very minimum level of per unit of risk i.e.0.037%.

2. First Life Premium to Total Life Premium Collection of NLGI.

From the analysis we found that the company's ratios on first life premium to total life premium collection of NLGI are in fluctuating trend. The highest ratio was in the fiscal year 058/59 i.e. 25.95% and least was in the fiscal year 062/63 i.e. 17.34%. The CV is 15.7412%. It shows that the ratios were little consistent and stable.

3. First Life Premium to Total Life Premium Collection of NLIC

The analysis showed the ratio between first life premium and total life premium collection of NLIC. The trend is in decreasing trend up to 058/59 to 062/63. The average ratio was 52.98% and the CV is 47.95%, this shows that the ratios are not stable and consistent.

4. First Life Premium to Total Life Premium Collection of LIC

From the analysis we found that the company's ratio on first life premium to total life premium collection ratio are in decreasing trend. It is due to abnormal situation of the country. It was decreasing continuously from 058/59 to 062/63. The highest value of CV is 57.381 % shows that the ratios are not stable and consistent.

5. First Life Premium to Total Life Premium Collection of ALICO

From the analysis we found that the company's ratio on first life premium to total life premium collection ratio are in decreasing trend. It is due to abnormal situation of the country. It was least in fiscal year 062/63 i.e. 41.21%. The CV is 34.254% which means that per unit risk of expected return is little high. So the ratios were not stable and consistent.

6. Renewal Life Premium to Total Life Premium Collection of RBS

The analysis of the ratio between renewal life premiums to total life premium of RBS showed that the ratios are almost same. This means that company's ratios were stable and consistent. The CV of 0.0050 % proves that the company is not suffering from risk.

7. Renewal Life Premium to Total Life Premium Collection of NLGI

From the analysis above, the ratio on renewal life premium to total life premium collection of NLGI is in fluctuating trend. The highest ratio was 82.66% in fiscal year 062/63 and least ratio was 74.05% in fiscal year 058/59. The calculated CV 4.275% showed the satisfactory result and reveal that the company was suffering from negligible risk.

8. Renewal Life Premium to Total Life Premium Collection of NLIC

From the analysis of ration on renewal life premium to total life premium collection on NLIC, the ratios are in increasing trend. This shows that the company's renewal life premium collection to total life premium collection is satisfactory. Among the study period the ratio was increased to 73.33% in fiscal year 062/63. The calculated CV 54.053% which is very high proves that the company's ratios were not stable and consistent.

9. Renewal Life Premium to Total Life Premium Collection of LIC

The analysis revealed that the company's ratios on renewal life premium collection to total life premium collection are in increasing trend. Its ratios are increasing from 058/59 to 062/63 continuously. The calculated CV is very high i.e. 60.229%, which shows that the ratios are not stable.

10. Renewal Life Premium to Total Life Premium Collection of ALICO

The analysis found that the ratios of renewal life premium to total life premium collection are in increasing trend. This means that the renewal life premium collection is satisfactory. But the calculated CV is maximum i.e. 89.603%, which means that their ratios are quite unstable. This means that per unit risk of this company is very much high as compare to other insurance companies.

11. Total Amount of Life Premium Collection by RBS

From the analysis it is clear that the majority part of life premium collection consists of renewal life premium. Renewal life premium ratios were almost same in every fiscal year i.e. 88% and first premium collection is almost 12% in every fiscal years. This means that the trend of ratio is quite stable and consistent.

12. Total Amount of Life Premium Collection by NLGI

From the analysis we found that the majority part of the premium collection consists of renewal premium collection. The renewal premium collection is highest in fiscal year 062/63 i.e. 82.66% and lowest ratio of renewal premium collection 74.05% in fiscal year 058/59. Both first and renewal premium collection is in fluctuating trend.

13. Total Amount of Life Premium Collection by NLIC

From the analysis it is clear that the ratio of first life premium collection of NLIC is in decreasing trend and the renewal life premium collection of NLGI is in increasing trend.

14. Total Amount of Life Premium Collection by LIC

From the analysis it was found that the first life premium ratio is in decreasing trend and renewal life premium ratio is in increasing trend. The first life premium collection is 100% in fiscal year 058/59.

15. Total Amount of Life Premium Collection by ALICO

The analysis showed the total amount of life premium collection by ALICO. From the analysis it was found that the first life premium collection ratio of ALICO is 100% in 058/59 and it was decreasing continuously up to study period. It was 41.21% in fiscal year 062/63. The analysis also revealed that the ratio of renewal life premium collection is in increasing trend.

16. Comparison of Life Premium Collection of RBS

From the analysis of comparison of life premium collection of RBS, we have found that the first, renewal and total life premium of RBS was fluctuating from year to year but with same percentage changes in first, renewal and total life premium collection. The percentage of changes in first, renewal and total life premium collection was same during the whole study period (fiscal year from 058/59 to 062/63). The highest changes was taken place in the fiscal year 060/61 i.e. 14.154%. The highest negative fluctuation in first, renewal and total life premium collection was in the fiscal year 059/60 i.e. – 4.544%.

17. Comparison of Life Premium Collection of NLGI

From the analysis it was found that the percentage changed in first and renewal life premium is fluctuating year to year. There was only one positive change of 45.60% in first premium in the fiscal year 061/62. The lowest negative fluctuation in first life premium collection was in the fiscal year 060/61. It was cleared from the analysis that the trend of change in first premium collection was not satisfactory. The trend of total premium collection was in decreasing trend. It was

34.476% in the fiscal year 059/60 and it was decreased to -3.622% in the fiscal year 060/61 which was least premium collection as compare to other fiscal years period. After that, it was increased to 29.183% and again decreased to 9.9915%.

18. Comparison of Life Premium Collection of NLIC

The analysis found that there was high percentage change in renewal life premium collection. The changes in renewal premium collection was highest i.e. 1127.699% in the fiscal year 058/59. But thereafter the percentage changes in renewal life premium were decreasing up to 44.536% in the fiscal year 062/63. The analysis revealed that there was more fluctuation in total premium collection. It was fluctuate negatively by -78.3261% in the fiscal year 059/60. The percentage changes in first premium collection was 38.29%, 45.53% in the fiscal year 059/60 and 060/61 respectively. Thereafter it was decreased by 6.45% in the fiscal year 061/62 and negatively changed by -11.08% in the fiscal year 062/63.

19. Comparison of Life Premium Collection of LIC

From the analysis of comparison of life premium collection of LIC it was found that there were not any negative changes in first, renewal and total life premium collection. The highest changes of 66.465% in first premium collection were in the fiscal year 060/61 and the least changes of 6.133% were in the fiscal year 061/62. The trend of renewal premium collection was significant to the fiscal year from 058/59 to 061/62. But thereafter it was decreased by approximately 50% as compare to previous years in the fiscal year 062/63. The highest changes in total premium collection were in the fiscal year 059/60 but it was decreasing thereafter up to the study period (fiscal year 062/63).

20. Comparison of Life Premium Collection of ALICO

The analysis of comparison of life premium collection of ALICO found that the percentage changes in first, renewal and total life premium collection was in

decreasing trend during the study period. The highest changes in first premium collection was in the fiscal year 059/60 i.e. 566.84% which was very satisfactory result of the company. Thereafter it was in decreasing trend. The least changes in first premium collection was in the fiscal year 062/63 i.e. 15.23% which shows that the result of the company is not satisfactory. The analysis also showed that the company had significant result in the fiscal year 059/60 as comparison to other fiscal years. The analysis also revealed that the trend of renewal and total premium collection were fluctuating year to year.

21. Total Premium Collection and % Change (Increase) in Premium Collection in Comparison to Previous Fiscal Year of all Life Insurance Companies

From the analysis it was found that the percentage of total premium collection was in increasing trend as compare to previous fiscal years. There was Rs. 153.11 crore premium collection in the fiscal year 058/59, thereafter the total premium collections were increased by 19.01%, 36.69%, 26.04%, 18.82% and 23.05% in the fiscal year 059/60, 060/61, 061/62, 062/63 and 063/64 respectively. The table also revealed that the highest increase in total premium collection was in the fiscal year 058/59 as comparison to other fiscal years. The data of 063/64 was expected data provided by Beema Samiti. The analysis also found that the amount of total premium collection were increased, but the percentage of increases as compare to previous fiscal year was in fluctuating trend.

22. Claims Paid to Premium Collection of NLGI

From the analysis of the ratio of claims paid to premium collection of NLGI it was found that the ratio lies in between 1.53% to 3.49%. The highest claims paid 3.49% was in the fiscal year 062/63 and lowest claim paid 1.53% was in the fiscal year 059/60. The ratios of claims paid showed that the life insurance company was low risky. The ratio of claims paid was slightly increased from the fiscal year

060/61 to the study period i.e. fiscal year 062/63. The average of 2.768% covered the ratio of claims paid to total life premium collection. The CV of 29.11% means that there was little inconsistency in claims paid.

23. Claims Paid to Premium Collection of NLIC

From the analysis, it was clear that the claims paid of NLIC were in fluctuating trend. The highest claim paid to total premium collection was 1.71% in the fiscal year 063/64 and lowest claim paid to total premium collection was 0.386% in the fiscal year 058/59. The average was 1.225% and the calculated CV was 42.68% which means that there were inconsistency in claims paid and ratios were not stable.

24. Claims Paid to Premium Collection of LIC

From the analysis it was found that the ratios of claims paid to total premium collection of LIC was fluctuating year to year. The highest claims paid were 1.59% in the fiscal year 061/62 and lowest claims paid was 0.605% in the fiscal year 060/61. The average of 1.257% of total premium collection went to claims paid by the company. The calculated CV was 30.468% which means that there were little inconsistency in the claims paid and ratios were not stable.

25. Claims Paid to Premium Collection of ALICO

The analysis found that the ration of claims paid to total premium collection were in increasing trend. The ratios were ranges from 0.1152% to 0.7047%. The average was 0.375% which indicates that the company was suffering from low risk in claims paid. But the calculated CV was 67.103% which was high CV. This high CV indicates that ratio of claims paid to total premium collection of ALICO is inconsistency and were not stable.

26. Investment Pattern of RBS

The analysis indicated the investment pattern of RBS. The analysis found that investment on government securities and fixed investment were not fluctuated from year to year. The investment during the study period was 20.8% and 79.11% on government securities and fixed investment in commercial and development bank respectively. There was no any investment on financial companies as fixed deposit. The highest average investment of 79.102% of total investment was invested in fixed deposit at banks. The analysis found that the ratios of investment made on government securities and bank fixed deposits were significant but there is little inconsistency on investment made on other sectors like share, debenture, CIT etc.

27. Investment Pattern of NLGI

From the analysis it is clear that the investment made on government securities was in fluctuating trend. The highest investment on fixed deposit on commercial and development bank was 86.97% in the fiscal year 058/59. The highest average of 74.49% went to fixed investment in banks. There was little bit inconsistency in the investment made on government securities and fixed deposit in commercial and development bank. The high CV of 92.0% revealed that there was high inconsistency and ratios of investment made on fixed deposits in financial companies were not stable. There was also inconsistency in the ratios of investment made on miscellaneous.

28. Investment Pattern of NLIC

Analysis of data showed that, the investment in government securities were fluctuating in the study period. There was only one investment of 6.09% of total investment in fixed deposit in financial companies in the fiscal year 060/61. The company did not invest in other sectors like share, debenture, short term

investment etc up to the fiscal year 059/60. After 059/60 the company invested its fund as miscellaneous investment.

The highest average investment of 72.71% out of total investment went to fixed deposits in commercial and development bank. The ratios of investment in fixed deposit in banks are little bit inconsistency. But the high CV in investment in other sectors revealed that investment ratios are insignificant, inconsistency and not stable.

29. Investment Pattern of LIC

The analysis exposed that the investment was in fluctuating trend. The highest investment out of total investment in fixed deposit in commercial and development banks was 95.98%. There were fluctuations in the investment made in financial companies. The company had started to invest in other sectors like share, debentures etc. from the fiscal year 059/60. The highest average of 71.62%, out of total investment was gone to fixed investment in commercial and development banks. The analysis revealed that there were inconsistency and ratios were not stable in the investment made in government securities, fixed deposits in financial companies and investment in miscellaneous sectors. There was also little inconsistency in the investment made of fixed deposit in commercial and development banks.

30. Investment Pattern of ALICO

From the analysis, it was cleared that there were not any investment in fixed deposits in commercial, development banks & financial companies. The analysis also showed that there was not any miscellaneous investment. The company had invested portion of its fund only in government securities from fiscal year 059/60 to 062/63. The average of 80% out of total investment indicates the percentage of investment in government securities. But the investment amount as compare to

premium collection is very low. The high standard deviations indicate the high total risk of the company. The high values of CV indicate that the investment of ALICO is highly inconsistent and ratios of investment were not stable.

31. Investment Pattern of all Life Insurance Companies in Aggregate

From the analysis, it was found that all the companies had given more priority to invest in fixed deposit in commercial and development banks. The average of 69.19% out of total investment indicates the investment made in fixed deposits in commercial and development bank. In aggregate the percentage of investment in government securities were in increasing trend. But analysis showed that the investment was decreased to 16.24% in the fiscal year 062/63 due to unfavorable situation of the country. In aggregate only few percentage out of total investment was made on fixed deposit in financial companies. It lies between 0% to 5.35% out of total investment. The analysis found that the ratio of investment in other sectors as miscellaneous investment was in increasing trend during the study period. The investment as miscellaneous varies from 2.98% to 10.50% out of total investment.

There was inconsistency in the investment made on government securities and investment as miscellaneous sectors by life insurance companies in aggregate. It also revealed that the ratios of investment was not stable.

The analysis also revealed that the ratios of investment in fixed deposits in commercial and development banks were nearly consistent and stable. But the higher value of CV indicates, highly inconsistency in investment made on fixed deposit in financial companies.

32. Comparison of Investment of RBS

From the analysis it was cleared that the percentage change (increase or decrease) in investment in government securities and fixed deposit at commercial and development bank during the study period were equal. The highest increment in investment in government securities was 17% in the fiscal year 060/61 and decrease in investment as compare to other fiscal years was 9.18% in the fiscal year 062/63. The analysis revealed that investment in fixed deposits at commercial and development bank were in fluctuating trend.

As compare to other fiscal years the highest increment in the investment at government securities, fixed deposits at bank and miscellaneous were 17%, 16.96% and 71.7% respectively in the fiscal year 060/61. The increment in total investment was also in fluctuating trend. The company had decreased its investment as miscellaneous investment by -12.09% in the fiscal year 061/62 as compare to the fiscal year 060/61.

33. Comparison of Investment of NLGI

From the analysis it was found that the life fund invested by NLGI was in fluctuating trend. The highest increment in the investment of government saving bond was 166.90 % in the fiscal year 059/60 and the lowest was -8.89 % in the fiscal year 060/61. In the context of bank fixed deposits, the highest increment 17.96% in the fiscal year 062/63 and the lowest increment was -0.79% in the fiscal year 059/60. The company has invested in the financial companies since fiscal year 060/61. The highest increment was 17.96 % in the fiscal year 062/63 and the lowest increment was -6.897 % in the fiscal year 061/62. The increment in the investment in other sectors was highest in the fiscal year 059/60 i.e 105.6% and the lowest increment was -23.52% in the fiscal year 062/63. the analysis also showed that the percentage increment in the investment in government securities, bank fixed deposits and investment in fixed deposit in finance was same in the

fiscal year 062/63 ie. 17.96%. The analysis also revealed that the highest increment in total investment was 18.42% in the fiscal year 059/60 and lowest increment was 11.66% in the fiscal year 061/62.

34. Comparison of Investment of NLIC

The analysis showed that the NLIC had invested Rs 180000000 only in bank fixed deposits in the fiscal year 058/59. The highest increment in the investment in government securities was 101.9% in the fiscal year 060/61 and lowest increment was 1.35% in the fiscal year 062/63. The analysis also found that the investment by NLIC in different sectors was fluctuating year to year. The highest increment in the investment in bank fixed deposits was 95.67% in the fiscal year 059/60 and lowest increment was 23.24% in the fiscal year 063/64. It was found that the company had invested Rs 47200000 only at once in fixed deposits in financial companies during the study period.

The company had started to invest its fund in other sectors only from fiscal year 060/61. The highest increment in the investment in other sectors as miscellaneous sectors was 118.4% in the fiscal year 061/62. The increment in total investment was in decreasing trend. The highest increment in total investment was 158.5% in 059/60 and lowest increment was 20.43% in the fiscal year 061/62.

35. Comparison of Investment of LIC

The analysis found that the increment in investment in government securities lies between 0% to 186.62% .The investment of Rs 140663495 in government securities was neutral in the fiscal year 061/62 and 062/63. There were gradually increment in the investment made on fixed deposits at banks in the fiscal year 059/60, 060/61 and 061/62. The company had invested Rs 7950000 in fixed deposits in financial companies in the fiscal year 058/59. The company had started to invest in fixed deposits in financial companies from the fiscal year 060/61. The

highest increment in the investment in fixed deposits in financial sectors was around 260% in the fiscal year 061/62 and 062/63. There was drastic falls in investment in financial companies in the fiscal year 063/64. The company had highest increment in the investment in miscellaneous sector was 358.5% in the fiscal year 060/61. The analysis showed that the company had started to invest more funds in miscellaneous sectors from the fiscal year 060/61 as compare to previous fiscal year. The company had highest increment of 82.82% in total investment was made on the fiscal year 059/60 and the increment in total investment in other fiscal years was average of 55%. The analysis also revealed that the LIC company have given more priority to invest in government securities in the fiscal year 063/64.

36. Comparison of Investment of ALICO

Form the analysis, it was found that the company did not have invested any of their funds in fixed deposits in banks, financial institutions and other sectors. The ALICO company had invested its fund only in government securities since 059/60. The highest increment of investment in government securities was 2350% in the fiscal year 060/61. From the analysis it was cleared that the investment in government securities are more fluctuating during the study period. There was negative increment of -85.24% in the fiscal year 062/63. The highest amount invested in government securities was Rs 701181794 in the fiscal year 061/62. This analysis revealed that the ALICO company had given priority to invest only in government securities.

37. Comparison of Investment of Life Insurance Companies in Aggregate

From the analysis it was found that the trend of investment in aggregate in government securities and miscellaneous was in decreasing trend. The increment of 40.97% in the fiscal year 059/60 was the highest increment and negative

increment of -12.7% was lowest increment in the fiscal year 062/63 in the investment in government securities by selected life insurance companies.

The average investment in fixed investment by life insurance companies was approximately 16% during the study period except in the fiscal year 060/61. The highest increment in the investment in miscellaneous sectors was 111.9% in the fiscal year 059/60 and lowest investment change was 35.53% in the fiscal year 062/63. The investment made on fixed deposits during the fiscal years was nearly constant. There was fluctuation in changes in total investment during the study period. The highest increment in total investment was 23.86% and lowest increment was 10.19% in the fiscal year 060/61 and 062/63 respectively. The analysis also revealed that the investment in all sectors in the fiscal year 062/63 was gradually decreasing as compare to other fiscal years during the study period.

38. Return on Investment in Different Sectors by NLGI

The analysis revealed that the calculated returns on investment in government securities are some what fluctuating year to year. The average return on investment in government securities was 12.47%. The company had got highest return from the investment in fixed deposits in commercial and development bank. The average return was 81.54% which indicates the highest return among the investment in different sectors. The return from investment in miscellaneous sectors was varied from 0.57% to 11.57% which indicates the returns were fluctuating yearly. The low standard deviation indicates the minimum risk in return of investment in government securities, bank fixed deposits and miscellaneous. The CV of return in investment in government securities indicates the ratios were little inconsistency. The CV of investment in fixed deposits revealed the ratios were nearly consistent. The high CV of 82.17% indicates the ratios of return on investment as miscellaneous were highly inconsistency and not stable.

39. Return on Investment in Different Sectors by NLIC

From the analysis it was cleared that the return on investment in government securities was in increasing trend. But the return percentage was declined to 19.52% in the fiscal year 062/63. The average of 13.49% represents the return on investment from government securities. The high value of CV of 90.10% on investment return on government securities revealed that there was highly inconsistency of return and the ratios were not stable.

The return from investment in fixed deposits at banks and financial institutions were in decreasing trend. The CV of return on investment in fixed deposits was indicates that the ratios of return were little inconsistent. The return from investment as miscellaneous was in fluctuating trend. The ratios were varied from 1.25% to 22.02%. The average return on investment as miscellaneous was 8.21%. The value of CV was 101.35%, which was very high, indicates that per unit risk of the company was very high and there was inconsistency of return and the ratios were not stable.

40. Return on Investment in Different Sectors by LIC

From the analysis, it was found that the return on the investment made on government securities and fixed deposits are increasing to middle of the study period and decreasing after the middle of the study period and vice versa. The average return on investment in government securities was 12.35%. The 90.78% CV indicates inconsistency of its return.

The analysis also found that the return on fixed deposits were in decreasing trend. But after the fiscal year 060/61 return was gradually increased to 77.9% and 82.8% in the fiscal year 061/62 and 062/63 respectively. The average return on fixed deposits was 84.34%, which indicates that the company got the highest return from the investment made in fixed deposits. The lower value of CV

indicates that the returns on fixed deposits are nearly consistent and ratios are almost stable.

The return from miscellaneous investment was fluctuating year to year. The average return on miscellaneous investment was 3.306%. The value of CV was 54.20% indicates that the return on investment was not consistent and the ratios were not stable.

41. Return on Investment in Different Sectors by ALICO

From the analysis, it was found that the company had got return on investment in government securities from the fiscal year 060/61. The analysis also found that the company got the highest return from the investment made on government securities. The average return on investment in government securities was 55.80%. The high value of CV indicates that the return was inconsistent and ratios were not stable.

The returns on fixed deposits were highly fluctuated during the study period. The average return was 25.73% and its standard deviation was 41.97 which means the company had high risk. The high CV revealed that the return on fixed deposit was not significant and ratios were not stable.

The company had invested as miscellaneous investment only in the fiscal year 058/59 and 061/62 during the study period. The very high CV of 220.02% indicates that the company was suffering from per unit risk of the return and the returns on investment were not consistent and ratios were not stable.

42. Return on Investment in Different Sectors by Selected Life Insurance Company in Aggregate

From the analysis, it was found that the return on investment in different sectors by selected life insurance companies except RBS were fluctuating year to year. The average return on investment on government securities was 17.78%. The value of calculated CV indicates that the returns on investment in government securities in aggregate were not consistent.

The analysis also exposed that the life insurance companies had invested more of their funds in fixed deposits in banks and financial institutions. That's why they have got highest return from the fixed deposits. The average return on fixed deposits was 76.16% out of total return. The lowest return was in the fiscal year 062/63 due to economic condition of the country. Its calculated CV revealed that the return on fixed deposits in aggregate was nearly consistent.

The return from investment in miscellaneous sectors was fluctuating year to year. The company in aggregate get the highest return of 9.73% out of total return in the fiscal year 062/63 and the lowest return is 2.48% out of total return in 059/60. It yield average return on miscellaneous investment is 6.05%. The value of CV indicates that the ratios of return in aggregate from the investment in miscellaneous sectors by life insurance companies were not consistent and the ratios were not stable.

43. Comparison of Investment Return of NLGI

The analysis revealed that the return on investment made by NLGI during the study period was in fluctuating trend. The highest increment in the return on investment in government securities was 84.38% in the fiscal year 060/61 and the lowest was -9.57 % in the fiscal year 059/60. There was not any change on return

on the investment in government securities during the fiscal year 061/62 and 062/63.

In the context of bank fixed deposits and fixed deposits in financial company, the highest increment in return was 23.14% in the fiscal year 061/62 and the lowest increment was negative -0.70% in the fiscal year 060/61.

The analysis also revealed that the increment in the return from investment in other sectors was highest in the fiscal year 060/61 i.e 2452.75% and the lowest increment in return was -44.14% in the fiscal year 059/60. The analysis also revealed that the highest increment in total return on total investment was 22.18% in the fiscal year 060/61 and lowest increment in total return on total investment was 7.82% in the fiscal year 059/60. The companies return on investment in government securities and miscellaneous sectors was not satisfactory in the fiscal year 059/60 and 061/62.

44. Comparison of Investment Return of NLIC

From the analysis, it was cleared that the NLIC had got highest increment in the return on investment in government securities by 2333.33% in the fiscal year 060/61, which was highest increment in the return on investment during the study period. The analysis also revealed that the return on the investment by NLIC in different sectors was fluctuating year to year. The highest increment in the return of investment in bank fixed deposits and finance company fixed deposits was 49.98% in the fiscal year 059/60 and lowest increment in return was 12.35% in the fiscal year 060/61. It was cleared from the analysis that the increment in return on investment in miscellaneous sectors was satisfactory during the study period except in the fiscal year 061/62 due to negative increment of -36.01%. The increment in total return on total investment was in decreasing trend because of unstable situation of the country.

45. Comparison of Investment Return of LIC

The analysis found that the increment in investment return from investment in government securities lies between 0% to 2151.7% . The investment return on the investment made by LIC in different sectors was fluctuating year to year. The company had highest increment in return in the investment in miscellaneous sector was 512.79% in the fiscal year 059/60. The company had negative changes of -26.45% and -7.84% in the fiscal year 060/61 and 061/62 respectively in return on investment in miscellaneous sectors. The analysis also revealed that the LIC company had fluctuating total return during the study period. The company had got highest return from the investment made in fixed deposits at bank and finance companies.

46. Comparison of Investment Return of ALICO

From the analysis, it was found that the company had got highest return from the investment in government sectors was 204.68% in the fiscal year 062/63. The analysis showed that the increment in the returns from investment in government securities were in increasing trend. From the analysis it was found that the company have highest increment in return from investment in fixed deposits in banks and financial companies was 316.10%.

The analysis also revealed that the company did not have return from miscellaneous investment except in the fiscal year 058/59 and 061/62 during the study period. The ratio of percentage change in total return from total investment was fluctuating year to year. There were increment in the total return from total investment from the fiscal year 060/61 as compare to previous fiscal years.

47. Comparison of Return from Investment in Aggregate

As per analysis, it was cleared that the highest increment in return from the investment made by life insurance companies in government securities was

395.18% in the fiscal year 060/61. There was only 0.18% increment in total return from the investment in government securities in the fiscal year 059/60. The analysis found that the highest increment in the return among the all investment sectors was from the investment in government securities. The highest increase in income from fixed investment was 34.37% in the fiscal year 061/62, during the study period. The lowest rise in return from fixed investment was 4.45% in the fiscal year 060/61. The negative increments in miscellaneous sectors indicate that the investment returns were not satisfactory during the study period. In average, the life insurance companies has got approximately 40% total return from total investment in the fiscal year 060/61 and 062/63. The average return from total investment in other fiscal years was approximately 26%. The analysis also found that the returns from investment in different sectors were fluctuating during the study period.

48. Correlation of Premium Collection and Investment of RBS

From the analysis, it was found that there was moderate degree of positive correlation between the premium collection by RBS and its investment. That reveals average premium collection means average investment.

The analysis also found that the coefficient of determination was 0.3976, which means that the variation in independent variable (premium collection) explains 39.76% of variations in dependent variable (investment).

The analysis also concludes that the relation between the two variables was not significant.

49. Correlation of Premium Collection and Investment of NLGI

From the analysis, it was cleared that there was high degree of positive co-relation between the premium collection by NLGI and its investment. That reveals more premium collection means more investment.

The analysis also found that the coefficient of determination was 0.9109, which means that the variation in independent variable (premium collection) explains 91.09 % of variations in dependent variable (investment).

It was cleared from the analysis that the relation between the two variables was highly significant.

50. Correlation of Premium Collection and Investment of NLIC

From the analysis, it was found that there was higher degree of positive relationship between the premium collection by NLIC and its investment. That reveals more premium collection means more investment.

The analysis also revealed that the coefficient of determination is 0.9752, which means that the variation in independent variable (premium collection) explains 97.52% of variations in dependent variable (investment).

It was cleared from the analysis that the relation between the two variables was highly significant.

51. Correlation of Premium Collection and Investment of LIC

The analysis revealed that there was higher degree of positive relationship between the premium collection by LIC and its investment. That reveals more premium collection means more investment.

From the analysis, it was found that the coefficient of determination was 0.9737, which means that the variation in independent variable (premium collection) explains 97.37% of variations in dependent variable (investment).

The analysis also found that the relation between the two variables was highly significant.

52. Correlation of Premium Collection and Investment of ALICO

The analysis found that there was lower degree of positive relationship between the premium collection by ALICO and its investment. That reveals more premium collection does not mean more investment.

The analysis also found that the coefficient of determination was 0.1958, which means that the variation in independent variable (premium collection) explains 19.58% of variations in dependent variable (investment).

It was cleared that the relation between the two variables was highly insignificant.

53. Correlation of Premium Collection and Investment in Aggregate

The analysis revealed that there was higher degree of positive relationship between the premium collection by life insurance companies in aggregate and its investment. That reveals more premium collection means more investment.

The analysis found that the coefficient of determination was 0.9846, which means that the variation in independent variable (premium collection) explains 98.46% of variations in dependent variable (investment).

It was cleared from the analysis that the relation between the two variables was highly significant.

54. Correlation between Premium Collection and Claims Paid of NLGI

From the analysis it was found that there was higher degree of positive relationship between premium collection and claim paid of NLGI. It reveals that more premium collection means more claim paid.

The analysis also found that the coefficient of determination was 0.7616, which means that the variation in independent variable (premium collection) explains 76.16 % of the variation in dependent variable (claims paid).

It was cleared from the analysis that the relation between the two variables was significant.

55. Correlation between Premium Collection and Claims Paid of NLIC

The analysis revealed that there was moderate degree of positive relationship between premium collection and claim paid of NLIC. It reveals that average premium collection means average claim paid.

The analysis also found that the coefficient of determination was 0.4814, which means that the variation in independent variable (premium collection) explains 48.14 % of the variation in dependent variable (claims paid).

It was cleared from the analysis that the relation between the two variables was insignificant.

56. Correlation between Premium Collection and Claims Paid of LIC

From the analysis, it was found that there is higher degree of positive relationship between premium collection and claim paid of LIC. It reveals that more premium collection means more claim paid.

The analysis also found that the coefficient of determination was 0.8858, which means that the variation in independent variable (premium collection) explains 88.58 % of the variation in dependent variable (claims paid).

The analysis also revealed that the relation between the two variables was significant.

57. Correlation between Premium Collection and Claims Paid of ALICO

From the analysis, it was cleared that there was higher degree of positive relationship between premium collection and claim paid of ALICO. It reveals that more premium collection means more claim paid.

The analysis also found that the coefficient of determination was 0.9142, which means that the variation in independent variable (premium collection) explains 91.42 % of the variation in dependent variable (claims paid).

It was cleared from the analysis that the relation between the two variables was significant.

58. Correlation between Premium Collection and Claims Paid in Aggregate

The analysis found that there was higher degree of positive relationship between premium collection and claims paid by all life insurance companies except RBS. It reveals that more premium collection means more claim paid.

The analysis also found the coefficient of determination was 0.9216, which means that the variation in independent variable (premium collection) explains 92.16 % of the variation in dependent variable (claims paid).

From the analysis it was cleared that the relation between the two variables in aggregate was significant.

59. Correlation between Investment and Investment Return of NLGI

From analysis it was clear that there was higher degree of positive relationship between investment and investment return of NLGI. It indicates more investment means more net income or investment return.

The analysis also found that the coefficient of determination was 0.9850, which means that the variation in independent variable (investment) explains 98.50 % of the variation in dependent variable (net profit or investment return).

The analysis also revealed that the relation between the two variables was highly significant.

60. Correlation between Investment and Investment Return of NLIC

The analysis revealed that there was higher degree of positive relationship between investment and investment return of NLIC. It means that more investment means more net income or investment return.

The analysis also found that the coefficient of determination was 0.9757, which means that the variation in independent variable (investment) explains 97.57 % of the variation in dependent variable (net profit or investment return).

It was cleared from the analysis that the relation between the two variables was highly significant.

61. Correlation between Investment and Investment Return of LIC

From the analysis, it was clear that there was higher degree of positive relationship between investment and investment return of LIC. It indicates that more investment means more net income or investment return.

The analysis also found that the coefficient of determination was 0.9935, which means that the variation in independent variable (investment) explains 99.35 % of the variation in dependent variable (net profit or investment return).

It was cleared from the analysis that the relation between the two variables was highly significant.

62. Correlation between Investment and Investment Return of ALICO.

According to analysis, it was clear that there was lower degree of positive relationship between investment and investment return of ALICO. It means that more investment does not mean more net income or investment return.

The analysis also found that the coefficient of determination was 0.02316, which means that the variation in independent variable (investment) explains 2.316 % of the variation in dependent variable (net profit or investment return).

It was cleared from the analysis that the relation between the two variables was highly insignificant.

63. Correlation between Investment and Investment Return in Aggregate

From the analysis, it was clear that there was higher degree of positive correlation or relationship between investment and investment return of selected life insurance companies except RBS. It indicates that more investment means more net income or investment return.

The analysis also found that the coefficient of determination was 0.9282, which means that the variation in independent variable (investment) explains 92.82 % of the variation in dependent variable (net profit or investment return).

It was cleared from the analysis that the relation between the two variables was significant.

64. F-test (ANOVA) for Total Investment made by Different Life Insurance Companies in Five Years Period

From the analysis it was found that there was no significant difference in the total investment made in different periods (fiscal years).

It was also found that there were significant differences in total investment made by different life insurance companies.

65. F-test (ANOVA) for Total Premium Collection made by Different Life Insurance Companies in Five Years Period

From the analysis it was found that there were significant differences in total premium collection made by different life insurance companies.

The analysis also found that there was significant difference in the total premium collection made in different periods (fiscal years).

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

In the context of Nepal, insurance business is one of the financial intermediaries, which has not any loss and it suffered at profit from establishment date to till now. But the trend of premium collection, investment and investment return are fluctuated from year to year. In this study researcher compiled all the information and related articles about the insurance companies in the context of Nepal. As this study is the first study where all the life insurance companies are analyzed at one sequence. Researcher has tried to find out the new and appropriate results. Insurance has been introduced to safeguard the interest of people from uncertainties by providing certainty of payment at a given contingency. According to nature, characteristic and objective of the insurance company, they are also referred to as financial intermediaries. In the modern society, 21st centuries and business age it plays a vital role through risk bearing and providing certainty. Therefore insurance is an asset of a world's economy. Nepal is a developing

country. It is moving towards revolution and trying to initiate the modern technology in every field. For the entire development of the country, the government recognized the liberal economic policy and open competitive view. Thus after 1990's, financial intermediaries have been grown rapidly. Financial intermediaries consist of commercial banks, mutual bond and saving, finance company, insurance company etc. Among financial institutions and intermediaries, insurance company is also the major one.

The development of the country is possible only when competitive insurance services reach nooks and corners of the country. Insurance companies occupy quite an important place in the frame-work of every economy because it provides certainty to industry, business and capital for the development of the country. Industry in modern time is associated with every aspect of human activities. Most of the families depend in a single person income. If the earner becomes ill, the family finds nothing to survive on. Life insurance may be good solution in such circumstance. Still, we can say that insurance is not getting enough popularity among people. The numbers of insurance policies undertaken are almost negligible. A deep, study is needed to find out why insurance business has been unable to attract enough public attention. Even though, 98% of life insurance markets remain untouched by life insurance companies. The experts said that the life insurance companies could easily collect more than one thousand million without suffering any difficulties. Risk is the basis of insurance. It is meaningless to think life without risk. Risk is existed in every place and time. Only way to get protection from risk is insurance.

Premium collection and investment are the vital activities of insurance companies. Success and failure of any insurance company depend upon these activities. As the topic of the study, "A study on premium collection and investment pattern of life insurance companies in the context of Nepal" deals with the problems regarding

these important tasks of the company. The study is significant to the management of the company to take the right decision regarding the premium collection and investment. It also helps the management of the related and other insurance companies, shareholders, investors, customers, competitors, personnel and other stakeholders who can get necessary information. Researcher will also be benefited to research about the life insurance companies in the context of Nepal.

This study has been taken to evaluate the premium collection and investment pattern of life insurance companies in the context of Nepal. The study analyzed the five to six years annual reports and other relevant data has been taken in to consideration for the purpose of the study. Researcher has tried to find out accurate results as far as possible. To reveal the problems financial as well as statistical tools are applied.

In the context of Nepal, the insurance act aimed regulation should be clear enough to guide the investment related matter to a direction. The regulatory limits relating the investment should be promptly changed according to the change in over all macro economy and money capital condition. The insurance companies of Nepal are running smoothly but they have to face various problems. The main problems are cut- throat competition due to liberalization and privatization thus under rating and price cutting and unhealthy competition between each other. Terrorism and recession also creates a problem in the industry of insurance. The unfavorable condition of the country is the major problem of life insurance companies. In about claim received, time consuming procedures in accepting, issuing and survey report etc made delay in claim settlement.

5.2 Conclusion

This study was undertaken to find out the premium collection and investment position of life insurance companies in the context of Nepal. Regarding the

premium collection by all life insurance companies in aggregate, premiums collection are in increasing trend as compare to previous fiscal years. There was Rs 153.11 crore premium collection in the fiscal year 058/59. thereafter the total premium collection were increased by 19.01%, 36.69%,26.04%,18.82% and 23.05% in the fiscal year 059/60, 060/61, 061/62, 062/63 and 063/64 respectively. But the percentages increases as compare to previous fiscal year are in decreasing trend. Among five life insurance companies, RBS have constant percentage of first and renewal premium collection with negligible risk. The first and renewal life premium collection of NLGI is in fluctuating trend. But the first and renewal life premium collection of other three insurance companies are in decreasing and increasing trend respectively. From the analysis we found that the majority part of the premium collection consists of renewal life premium.

From the analysis, it is also found that the ratios of first and renewal life premium collection of RBS and NLGI are almost consistent and stable. But the ratios of NLIC, LIC and ALICO are not consistent and stable

While comparing the life premium collection of RBS, it is found that first, renewal and total life premium of RBS are fluctuating year to year but with same percentage changes in premium collection. The highest changes were taken place in the fiscal year 060/61 and lowest negative fluctuation of -4.54% in the fiscal year 059/60.

In conclusion, it is cleared that the trend of change in first premium collection of NLGI is not satisfactory. Because while comparing the ratios of NLGI during the study period, it is revealed that there was only one positive changes of 45.60% in first premium collection in the fiscal year 061/62 and the trend of total premium collection is also in decreasing trend.

The highest percentage of 1127.69% changes in renewal life premium collection concludes that NLIC have satisfactory result on renewal premium collection on the fiscal year 058/59. Thereafter it was decreased to 44.50% in the fiscal year 062/63, which is not the satisfactory result on the behalf of company. The analysis also concludes that there is more fluctuation in total premium collection.

The analysis of LIC premium collection concludes that there is significant result from the fiscal year 058/59 to the fiscal year 061/62 because the analysis found that there are not any negative changes in first, renewal and total life premium collection.

In conclusion, the result of analysis of ALICO shows that the percentage changes in first, renewal and total life premium collection are in decreasing trend during the study period. It is also cleared that the company had significant result in the fiscal year 059/60 as comparison to other fiscal years.

The average of 2.76% of total premium collection is went to claims paid of NLGI company, which is the highest average claims paid among the five life insurance companies. The highest CV of 67.10% indicates that the ALICO companies ratios of claims paid to total premium collection are inconsistent and unstable during the study period. As comparison to other life insurance companies, it is highly inconsistent in claims paid to total premium collection. Other life insurance companies ratios of claims paid to total premium collection are also fluctuating and little bit inconsistent.

In conclusion, it is cleared that all the life insurance companies have given more priority to invest in fixed deposits in commercial and development banks. The average net rate of investment is 69.19% out of total investment, indicates the investment made in fixed deposits in commercial and development banks. The investment in government securities is in increasing trend but analysis shows that

the investment was decreased to 16.24% in the fiscal year 062/63 due to unfavorable situation of the country. Only few percentage of the total investment have made on fixed deposits at financial companies. The investments in miscellaneous sectors are increasing year to year. It is also concludes that there is inconsistency in the investment made on government securities and investment as miscellaneous sectors by life insurance companies in aggregate.

The ratios of investments are not stable. In the context of RBS, the investment of 20.8% and 79.11% made on government securities and fixed deposits in banks respectively are satisfactory result. But there is still little inconsistency on investment made in other sectors like share, debentures etc. NLGI has maintained satisfactory investment on fixed deposits at bank. There is little inconsistency in the investment made on government securities. The company's high value of calculated CV reveals that the companies ratios of investment made on financial companies are on stable.

In conclusion, NLIC has fluctuating investments on government securities but it has maintained the investment of fixed deposits at banks. The high CV in investment in miscellaneous sectors results that the investment ratios are inconsistent and not stable.

The highest average of 71.62% out of total investment is gone to fixed investment in commercial and development banks, which shows that LIC has maintained its investment on fixed deposits at bank. There is fluctuation on investment made on fixed deposits at financial companies and miscellaneous sectors.

The average of 80% out of total investment by ALICO indicates the percentage of investment in government securities. The company's results from the analysis are not satisfactory as compare to other life insurance companies. ALICO do not have

invested any funds on fixed deposits and miscellaneous sectors, so the total risk of the company is very high. The high calculated CV reveals that the ALICO's ratios of investment are highly inconsistent and unstable.

In conclusion, the investment of RBS, NLGI and NLIC are fluctuating year to year. All the life insurance companies are competing with each other. It is found that the trend of investment on aggregate in government securities and miscellaneous sectors are in decreasing trend. The average investment in fixed investment by life insurance companies is approximately 16% during the study period except in the fiscal year 060/61. The investments made on fixed deposits during the study period are nearly constant. The total investment is fluctuating during the study period. It is also cleared that investment in all sectors as compare to other fiscal years are gradually decreasing during the study period.

The analysis found that RBS and ALICO do not have invested on fixed deposits at financial companies. NLIC have invested Rs 47200000 only at once in fixed deposits at financial companies during the study period. LIC and NLGI have started to invest in fixed deposits in financial companies from the fiscal year 060/61. While comparing the investment of life insurance companies, it is cleared that the total investment of all life insurance companies are fluctuating year to year. The lowest increment in the total investment was in the fiscal year 061/62 due to unfavorable situation of the country.

The investment as miscellaneous sectors has given priority up to the fiscal year 060/61 and then after it is in decreasing trend. ALICO have given priority to invest only in government securities. LIC have given more priority to invest in government securities in the fiscal year 063/64. These conditions are arising because of unstable present conditions of the country. The economical, political,

social etc is the situations which directly affects the conditions of financial intermediaries of the country.

The returns on the investment from different sectors by selected life insurance companies except RBS are fluctuating year to year. Life insurance companies have got highest return of 76.16% from the investment in fixed deposits at commercial and development banks. The ratios of return on investment in government securities and miscellaneous sectors are not stable and inconsistent.

All the companies get more return from the investment in fixed deposits at banks, but the returns from miscellaneous investment are fluctuating year to year. In comparison, returns of life insurance companies are decreasing in the fiscal year 062/63 due to unfavorable conditions of the country.

As per analysis, it is cleared that the highest increment in return from the investment made by life insurance companies from government securities is 395.18% in the fiscal year 060/61. Only 0.18% increment in total return from investment in government securities was taken place in the fiscal year 059/60. The analysis found that the return from fixed deposits in the fiscal year 060/61 is not satisfactory. The increment in the return during the study periods varies from approximately 26% to 40%, i.e. the returns from different sectors are fluctuating during the study period. The pattern of investment return shows that the returns from different sectors are fluctuating year to year. So there is highly competition between life insurance companies. NLIC and LIC had got highest increment of 2333.33% and 2151.71% from investment in government securities as compare to other life insurance companies. The increment in total return from total investment is fluctuating because of unstable situation of the country. The negative increment in returns from different sectors investment is not satisfactory result for the companies and total economy of the country.

The analysis of correlation between premium collection and investment concludes that the relation between these two variables of RBS and ALICO is not significant. But the relation between these two variables of NLGI, NLIC and LIC is highly significant. In conclusion, it is also cleared that the relation between premium collection and claims paid in aggregate is significant. But the relation between premium collection and claims paid of NLIC is not significant. From the analysis, it is found that the relation between investment and investment return of all life insurance companies is highly significant except the relation of ALICO.

In conclusion of analysis, it is cleared from F-test (ANOVA) that there is no significant differences in total investment made in different periods and it is also found that there is significant differences in total investment made by different life insurance companies.

F-test (ANOVA) on total premium collection made by different life insurance companies in 5-years period concludes that there are significant differences in total premium collection made by different life insurance companies. It is also cleared from the analysis that there is a significant difference in total premium collection made in different periods.

5.3 Recommendations

All the study is analyzed reviewing the secondary data from annual reports from Beema Samiti. Financial and statistical tools are applied to reveal the problems. The recommendations are provided on the basis of findings from the analysis.

First premium of life insurance hold significant role in total life premium collection. Higher the first and renewal life premium, higher the total premium collection. So all the life insurance companies should focus on premium collection

and make strategy to collect more first life premium collection. The ratios of first life premium collection to total life premium collection of RBS and NLGI is satisfactory i.e. almost consistent and stable. But the first life premium collection of NLIC, LIC and ALICO are in decreasing trend. So the ratios are not consistent and stable. Thus these companies should give priority to collect first life premium collection by making dynamic strategy in the competitive market of life insurance industry.

The renewal life premium collection of life insurance companies are in increasing trend but the ratios of renewal life premium collection to total life premium collection is inconsistent and unstable. Hence companies should aware about the risk of renewal life premium collection.

The majority part of premium collection consists of renewal life premium collection but the first life premium collection also hold significant important role in total life premium collection. So if the company success to collect more life premium collection, it automatically increases the total life premium collection in the following years. The insurance market of Nepal is very small. All the companies are capturing other's market without trying to create new market. They are functional traditionally. So these life insurance companies should issue new dynamic policies which can help to increase premium collection and its share in life insurance industry.

While comparing the premium collection during the study period, it is found that the percentage changes in first, renewal and total life premium collection are fluctuating year to year. In some study periods, there are negative percentage changes. These results of all life insurance companies show that all life insurance companies are not doing business safely and not satisfactory with regards to premium collection. Hence these companies should make proper strategies,

policies etc to collect more premiums and increase its share in life insurance industries.

The analysis found that the percentage of total premium collection of life insurance companies in aggregate is in increasing trend and it was highest in the fiscal year 058/59 as comparison to other fiscal years. But the ration in which the life industry should improve is not fulfilled by life insurance companies. This is because of traditional competition, government policies and unfavorable situation of the country. Hence, therefore life insurance companies and government should aware to enhance the development of the life insurance industries in the context of developing country Nepal.

Settlement of claims should be made in time. Delay in the settlement of claims may affect the business potentiality. Further, attention has to be adequately provided towards the faithfulness of the insured in connection with the claims arising due to the specified events.

Every insurance company should invest at least 75% of its investible funds towards compulsory sectors set by insurance board of Nepal; rest 25% can be diversified. So all life insurance companies have almost maintained this rule and diversify remaining its funds in other sectors life finance company fixed deposits, corporate securities, real estate, housing, vehicles, CIT etc. thus the life insurance companies should maintain 75% investment rule and also invest remaining funds in productive sectors. The proper analysis, study on research and development, expertise etc should be needed to invest the funds in different sectors.

As per secondary data availability and analysis it is recommended that ALICO Company should give more priority to invest in fixed deposits at banks and finance companies and invest in miscellaneous sectors inside the country. Other

life insurance companies should have to study, analyze and research & development is most.

The investment patterns of life insurance companies in different sectors are fluctuating during the study period. There are not any proper rules for investment in different sectors. The amounts of investment in different sectors are varied from year to year. From the analysis, it is found that the trend of investment in aggregate in government securities and miscellaneous sectors are in decreasing trend. The average investment in fixed investment by life insurance companies is only approximately 16% during the study period except in the fiscal year 060/61. To balance this situation, the life insurance companies, insurance board, rules and regulation of the country, policy of the country, economic condition of the country, government etc should be aware to establish a well developed, managed insurance industry in Nepal.

The returns from compulsory sectors and other sectors are fluctuating year to year. The ratios of returns form different sectors are inconsistent and unstable. Per unit risk of life insurance companies is high. Hence the life insurance companies should analyze the problems and try to solve it. The unstable situations of the country, economic instability, low people awareness, unhealthy competition are the major problems to decrease the returns. Thus, government, politician, economist, lawyer, professionals, all financial intermediaries, foreign investors etc should be aware to minimize such risk which will be very harmful in the future. If this condition goes on due to lack of research and development, lack of proper analysis, lack of government protection etc., then there will be a chance of liquidation of all life insurance companies in the future.

It is cleared from the analysis that in average highest increment in return is only from government securities. Banks, financial companies, CIT, real estate, housing,

corporate securities etc are unable to give the proper interest rate in investment. The present situation of the financial intermediaries and even situation of the economic condition of the country is not satisfactory.

The relation between premium collection and investment of all life insurance companies are significant except RBS and ALICO. Hence RBS and ALICO should try to maintain the relation between premium collection and investment. Similarly the relation between premium collection and claims paid of all life insurance companies is significant except NLIC. Hence to satisfy the insured person, to increase the goodwill in the market, to maintain the organization in the life insurance industry, NLIC should make high degree of positive relationship between premium collection and claims paid.

The relation between investment and investment return is significant except ALICO. ALICO has lower degree of positive relationship between investment and investment return. So ALICO should invest in productive sectors to make the better relation between investment and investment return. In conclusion, it is recommended that more investment means more investment return. Thus investment in productive sectors will make the company in good position.

There is difference in premium collection and investment pattern of life insurance companies during the study periods. There is also significant differences in total investment made by different life insurance companies even the total investment pattern on different periods is same. Hence the companies, which are not in good position with regard to premium collection and investment, should make strategy to collect more premiums and research & development, proper analysis on investment criteria should be made for better returns from investment.

Among five life insurance companies, the highest total sum amount of premium collection during the study period or the highest business is carried out by RBS, i.e. it covers 67.75% of total life premium collection of the life industry. Second ranking on total business is occupied by 10.38% by NLIC. The ratio of premium collection to total premium collection of life insurance industry are 8.73%, 7.22% and 5.89%, indicates the third, fourth and fifth ranking of ALICO, NLGI and LIC respectively.

Besides this, the life insurance companies should increase the efficiency of employees. Various programs should be held to develop the overall development of the company. Trainings, seminars, workshops, presentations etc should be organized timely by the life insurance industry, companies, financial sectors and governments for better performance. Proper man proper job, pace of new technology from developed country to developing country etc should be needed in the life insurance companies. The company should establish separate research and development department. This department looks the present potential business opportunities in the market. The companies annual reports, journals, articles, books etc should be transparent and published timely, which will help to create new opportunities in the market, may regain the power in the competitive life insurance industry, and may increase the peoples, analysts, experts, government, donors etc trust to organization.

The company should appoint more agents with skillful trainings to increase the business. The insurance business is competitive than the past years. Every life insurance companies should learn from the competitors. In life insurance industry every company have to maintain its position. Recently, four new life insurance companies have started their business. The newly established companies have overcome its premium collection amount, so it is highly recommend that the insurance companies whose business is low as compare to other insurance companies, should appoint more capable agents, announces new schemes to

increase the efficiency of the agents and launch new effective and attractive policies to attract the customers.

In the context of Nepal only 2% people have insured their life, rest 98% are not aware about life insurance business and its importance. Hence the life insurance companies are suggested to expand insurance activities in rural areas by the establishment of branches and by the appointment of agents according to its potentiality. This is the age of modern marketing. The life insurance business in the context of Nepal is highly competitive. So, advertisement and necessary marketing policies are most essential part of the life insurance companies to increase the business.

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APPENDICES

ANNEX - I

Correlation between Premium Collection and Investment of NLGI

Fiscal Year	x	y	$d_1 = (x - 306307890) / 1000000$	$d_2 = (y - 1136446836) / 1000000$	d_1^2	d_2^2	$d_1 d_2$
058/59	236339069	822332932	-69.97	-314.11	4895.63	98667.54	21978.18
59/60	317820224	973841436	11.51	-162.61	132.53	26440.52	-1871.97
60/61	306307890	1136446836	0	0	0	0	0
61/62	395700288	1268981238	89.39	132.54	7991.01	17565.37	11847.57
62/63	435236908	1437082292	128.93	300.63	16622.69	90381.68	38760.63
			$\sum d_1 =$ 159.86	$\sum d_2 =$ -43.55	$\sum d_1^2 =$ 29641.86	$\sum d_2^2 =$ 233055.1	$\sum d_1 d_2 =$ 70714.41

x = Premium Collection, y = Investment

$$r = \frac{n \sum d_1 d_2 - (\sum d_1) (\sum d_2)}{\sqrt{n \sum d_1^2 - (\sum d_1)^2} \sqrt{n \sum d_2^2 - (\sum d_2)^2}} = \frac{[(5 \times 70714.41) - \{(159.86) \times (-43.54)\}]}{\sqrt{5 \times 29641.86 - (159.86)^2} \sqrt{5 \times 233055.10 - (-43.54)^2}} = \frac{353572.05 + 6960.30}{350.21 \times 1078.60} = \frac{360532.35}{377736.50} \quad r = 0.9544$$

$$R^2 = 0.9109$$

$$P.E. (r) = 0.6745 \times \frac{(1 - r^2)}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.9109}{\sqrt{5}} = \frac{0.0601}{2.236} = 0.0268$$

$$6 P.E. (r) = 6 \times 0.0268 = 0.1611$$

(Note: Same method is used for the calculation of other life insurance companies).

ANNEX II

Correlation between Premium Collection and Claims Paid of NLGI

Fiscal Year	x	y	$d_1=(x-306307890)/$ 1000000	$d_2=(y-9792001)/$ 1000000	d_1^2	d_2^2	d_1d_2
058/59	236339069	5647008	-69.96	-4.14	4895.63	17.18	290.02
59/60	317820224	4865241	11.51	-4.92	132.53	24.27	-56.71
60/61	306307890	9792001	0	0	0	0	0
61/62	395700288	12771446	89.39	2.98	7991.01	8.87	266.33
62/63	435236908	15190391	128.93	5.39	16622.69	29.14	696.01
			$\sum d_1 =$ 159.86	$\sum d_2 =$ -0.69	$\sum d_1^2 =$ 29641.86	$\sum d_2^2 =$ 79.47	$\sum d_1d_2 =$ 1195.65

x = Premium Collection, y = Investment

$$r = \frac{n \sum d_1 d_2 - (\sum d_1) (\sum d_2)}{\sqrt{n \sum d_1^2 - (\sum d_1)^2} \sqrt{n \sum d_2^2 - (\sum d_2)^2}} = \frac{[(5 \times 1195.65) - \{(159.86) \times (-0.69)\}]}{\sqrt{5 \times 29641.86 - (159.86)^2} \sqrt{5 \times 79.47 - (-0.69)^2}} = \frac{5978.25 + 110.30}{350.22 \times 19.92} = \frac{6089.18}{6976.38}$$

$$r = 0.8728$$

$$R^2 = 0.7618$$

$$P.E. (r) = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{1-0.7618}{\sqrt{5}} = \frac{0.1606}{2.236} = 0.0718$$

$$6 P.E. (r) = 6 \times 0.0718 = 0.4309$$

(Note: Same method is used for the calculation of other life insurance companies).

ANNEX - III

Correlation between Investment and Investment Return of NLGI

Fiscal Year	x	y	$d_1=(x-1136446836)/1000000$	$d_2=(y-70946168)/1000000$	d_1^2	d_2^2	d_1d_2
058/59	822332932	53853266	-314.11	-17.09	98667.54	292.16	5369.11
59/60	973841436	58066105	-162.60	-12.88	26440.52	165.89	2094.36
60/61	1136446836	70946168	0	0	0	0	0
61/62	1268981238	78872691	132.53	7.92	17565.37	62.83	1050.53
62/63	1437082292	89541933	300.63	18.59	90381.68	345.80	5590.54
			$\sum d_1 =$ -43.55	$\sum d_2 =$ -3.45	$\sum d_1^2 =$ 233055.10	$\sum d_2^2 =$ 866.6956	$\sum d_1d_2 =$ 14104.57

x = Investment, y = Investment Return

$$r = \frac{n \sum d_1 d_2 - (\sum d_1) (\sum d_2)}{\sqrt{n \sum d_1^2 - (\sum d_1)^2} \sqrt{n \sum d_2^2 - (\sum d_2)^2}} = \frac{[(5 \times 14104.57) - \{(-43.55) \times (-3.45)\}]}{\sqrt{5 \times 233055.1 - (-43.54)^2} \sqrt{5 \times 866.69 - (-3.45)^2}} = \frac{70522.85 - 150.24}{1078.60 \times 65.74} = \frac{70372.61}{70907.16} = 0.9924$$

$$R^2 = 0.9848$$

$$P.E. (r) = 0.6745 \times \frac{(1 - r^2)}{\sqrt{n}} = 0.6745 \times \frac{1 - 0.9848}{\sqrt{5}} = \frac{0.0102}{2.236} = 0.00456$$

$$6 P.E. (r) = 6 \times 0.00456 = 0.0274$$

(Note: Same method is used for the calculation of other life insurance companies).

ANNEX IV

F-test (ANOVA) for Total Investment made by different Life Insurance Companies in Five Years Period

Total Investment (in 100 millions)

Fiscal Year/ Insurance companies	58/59	59/60	60/61	61/62	62/63
RBS	57.73	6.64	7.76	88.54	96.67
NLGI	8.23	9.74	11.36	12.69	14.37
NLIC	1.80	4.65	7.75	9.33	13.65
LIC	1.98	3.62	5.63	8.72	13.45
ALICO	0	0.09	2.22	7.01	1.03

The data are coded by subtracting 57.72 in each figure. Fiscal year is coded as A, B, C, and D, E for 58/59, 59/60, 60/61, 61/62 and 62 /63 respectively. The names of the insurance companies are coded as 1,2,3,4 and 5 respectively for RBS, NLGI, NLIC, LIC and ALICO respectively.

	A	B	C	D	E	T _r	A ²	B ²	C ²	D ²	E ²
1	0	-51.088	-49.96	30.82	38.94	-31.28	0	2609.98	2495.60	949.7491	1516.47
2	-49.51	-47.99	-46.36	-45.03	-43.35	-232.23	2450.41	2302.71	2149.23	2028.168	1879.58
3	-55.92	-53.07	-49.97	-48.39	-44.07	-251.43	3127.60	2816.72	2497.10	2341.276	1942.69
4	-55.75	-54.11	-52.09	-49.01	-44.27	-255.23	3107.56	2927.46	2714.05	2401.546	1959.99
5	-57.72	-57.64	-55.51	-50.71	-56.69	-278.27	3332.18	3321.74	3081.08	2571.827	3213.79
T_c	-218.89	-263.89	-253.89	-162.32	-149.45	-1048.45	ΣA ² =	ΣB ² =	ΣC ² =	ΣD ² =	ΣE ² =
							12017.76	13978.61	12937.14	10292.57	10512.55

Now, T= Grand Total = $\sum T_c = \sum T_r = - 1048.45$ and $n = 25$

$$\text{Correction Factor (CF)} = \frac{T^2}{n} = \frac{(-1048.45)^2}{25} = 43969.87$$

$$\begin{aligned} \text{Row Sum of Squares (RSS)} &= \sum A^2 + \sum B^2 + \sum C^2 + \sum D^2 + \sum E^2 \\ &= 12017.76 + 13978.61 + 12937.14 + 10292.57 + 10512.55 = 59738.63 \end{aligned}$$

$$\begin{aligned}\text{Total Sum of Squares of Variations (SST)} &= \text{RSS} - \text{CF} \\ &= 59738.63 - 43969.87 = 15768.76\end{aligned}$$

$$\begin{aligned}\text{Total sum of squares of variations between columns (SSC)} &= \frac{\sum T_c^2}{n_r} - \text{CF} \\ &= \left[\left\{ \frac{(-218.89)^2}{5} + \frac{(-263.89)^2}{5} + \frac{(-253.89)^2}{5} + \frac{(-162.32)^2}{5} + \frac{(-149.45)^2}{5} \right\} - 43969.87 \right] \\ &= \{ (9583.19 + 13927.37 + 12892.19 + 5269.72 + 4467.08) - 43969.87 \} \\ &= 46139.55 - 43969.87 = 2169.68\end{aligned}$$

$$\begin{aligned}\text{Total sum of squares of variation between rows (SSR)} &= \frac{\sum T_r^2}{n_c} - \text{CF} \\ &= \left[\left\{ \frac{(-31.28)^2}{5} + \frac{(-232.23)^2}{5} + \frac{(-251.43)^2}{5} + \frac{(-255.23)^2}{5} + \frac{(-278.27)^2}{5} \right\} - 43969.87 \right] \\ &= \{ (195.75 + 10786.91 + 12643.55 + 13028.01 + 15486.89) - 43969.87 \} \\ &= 52141.11 - 43969.87 = 8171.24\end{aligned}$$

Now, finally, total sum of squares due to error can be calculated by using following formula.

$$\text{SSE} = \text{SST} - \text{SSC} - \text{SSR} = 15768.76 - 2169.68 - 8171.24 = 5427.84$$

Mean sum of squares of variation between different fiscal years (MSC)

$$= \frac{\text{SSC}}{(c-1)} = \frac{2169.68}{(5-1)} = 542.42$$

Mean sum of squares of variation between different life insurance companies (MSR)

$$= \text{MSR} = \frac{\text{SSR}}{(r-1)} = \frac{8171.24}{(5-1)} = 2042.81$$

Mean sum of squares of variation due to error (MSE) = $\frac{\text{SSE}}{\{(c-1)(r-1)\}}$

$$= \frac{5427.84}{\{(5-1) \times (5-1)\}} = \frac{5427.84}{16} = 339.24$$

$$\text{F-ratio between fiscal years } F_c(4, 16) = \frac{\text{MSC}}{\text{MSE}} = \frac{542.42}{339.24} = 1.5989$$

$$\text{F-ratio between companies } F_r(4, 16) = \frac{\text{MSR}}{\text{MSE}} = \frac{2042.81}{339.24} = 6.0217$$

ANNEX V

F-test (ANOVA) for Total Premium Collection made by different Life Insurance Companies in Five Years Period

Total Investment (in 100 millions) :

Insurance companies/Fiscal Year	RBS	NLGI	NLIC	LIC	ALICO
58/59	11.53	2.36	0.87	0.42	0.12
59/60	11.01	3.18	1.88	1.28	0.86
60/61	12.57	3.06	3.31	2.66	3.30
61/62	12.31	3.96	4.66	3.99	6.48
62/63	12.07	4.35	5.77	5.43	9.68

The data are coded by subtracting 5.7680 in each figure. Fiscal year is coded as 1,2,3,4 and 5 for 58/59, 59/60, 60/61, 61/62 and 62 /63 respectively. The names of the insurance companies are coded as A, B, C, and D, E respectively for RBS, NLGI, NLIC, LIC and ALICO respectively.

	A	B	C	D	E	T _r	A ²	B ²	C ²	D ²	E ²
1	5.77	-3.40	-4.89	-5.34	-5.65	-13.53	33.27	11.59	23.99	28.564	31.92
2	5.24	-2.59	-3.88	-4.48	-4.90	-10.61	27.49	6.71	15.08	20.12	24.03
3	6.80	-2.70	-2.46	-3.11	-2.46	-3.93	46.27	7.32	6.03	9.66	6.07
4	6.54	-1.81	-1.11	-1.78	0.71	2.55	42.79	3.28	1.23	3.16	0.51
5	6.30	-1.41	6.74	-0.34	3.91	8.46	39.75	2.01	4.54	0.11	15.31
T_c	30.66	-11.93	-12.35	-15.05	-8.39	-17.06	$\Sigma A^2 =$	$\Sigma B^2 =$	$\Sigma C^2 =$	$\Sigma D^2 =$	$\Sigma E^2 =$
							189.59	30.89	46.35	61.61	77.84

Now, T= Grand Total = $\Sigma T_c = \Sigma T_r = - 17.06$ and $n = 25$

$$\text{Correction Factor (CF)} = \frac{T^2}{N} = \frac{(-17.06)^2}{25} = 11.64$$

$$\begin{aligned} \text{Row Sum of Squares (RSS)} &= \Sigma A^2 + \Sigma B^2 + \Sigma C^2 + \Sigma D^2 + \Sigma E^2 \\ &= 189.59 + 30.89 + 46.35 + 61.61 + 77.84 = 406.29 \end{aligned}$$

$$\begin{aligned} \text{Total Sum of Squares of Variations (SST)} &= \text{RSS} - \text{CF} \\ &= 406.29 - 11.64 = 394.65 \end{aligned}$$

$$\begin{aligned}
\text{Total sum of squares of variations between columns (SSC)} &= \frac{\sum Tc^2}{n_r - CF} \\
&= \left[\left\{ \frac{(30.66)^2}{5} + \frac{(-11.93)^2}{5} + \frac{(-12.35)^2}{5} + \frac{(-15.05)^2}{5} + \frac{(-8.39)^2}{5} \right\} - 11.64 \right] \\
&= \{(188.02 + 28.45 + 30.51 + 45.32 + 14.08) - 11.64\} \\
&= 306.38 - 11.64 = 294.74
\end{aligned}$$

$$\begin{aligned}
\text{Total sum of squares of variation between rows (SSR)} &= \frac{\sum Tr^2}{n_c} - CF \\
&= \left[\left\{ \frac{(-13.53)^2}{5} + \frac{(-10.61)^2}{5} + \frac{(-3.93)^2}{5} + \frac{(2.55)^2}{5} + \frac{(8.46)^2}{5} \right\} - 11.64 \right] \\
&= \{(36.61 + 22.54 + 3.09 + 1.31 + 14.32) - 11.64\} \\
&= 77.87 - 11.64 = 66.23
\end{aligned}$$

Now, finally, total sum of squares due to error can be calculated by using following formula.

$$SSE = SST - SSC - SSR = 394.65 - 294.74 - 66.23 = 33.68$$

Mean sum of squares of variation between different fiscal years (MSC)

$$= \frac{SSC}{(c-1)} = \frac{294.74}{(5-1)} = 73.68$$

Mean sum of squares of variation between different life insurance companies (MSR)

$$= MSR = \frac{SSR}{(r-1)} = \frac{66.23}{(5-1)} = 16.557$$

Mean sum of squares of variation due to error (MSE) = $\frac{SSE}{\{(c-1)(r-1)\}}$

$$= \frac{33.68}{\{(5-1)(5-1)\}} = \frac{33.68}{16} = 2.105$$

$$F\text{-ratio between fiscal years } F_c(4, 16) = \frac{MSC}{MSE} = \frac{73.68}{2.105} = 35.00$$

$$F\text{-ratio between companies } F_r(4, 16) = \frac{MSR}{MSE} = \frac{16.557}{2.105} = 7.865$$

**g]kfndf hLjg aLdf Aoj;fo ;+rfng ug]{ aLdsx?sf] hLjg aLdfz'Ns cfh{gsf]
 l:ylt
 -cf=a=)%*÷%(b]lv)^ @÷^# ;Ddsf]_**

CF=A=	LJJ)/F	/FLI^O ALDF ;+:YFG	G]ZGN NFO{KM O{=S+=LN=	G]KFN NFOKM O=S+=LN=	NFOKM O=SKF]{/ZG -G] LN=	CD]L/SG NFOKM O=S+= (ALICO)	HDDF
58+59	K YD ALDFZ'NS	138,434,604	61,340,052	80,681,204	42,418,710	11,818,526	334,693,096
	G]LS)/F ALDFZ'NS	1,015,187,096	174,999,017	6,252,583			1,196,438,696
	HDDF ALDFZ'NS	1,153,621,700	236,339,069	86,933,787	42,418,710	11,818,526	1,531,131,792
59+60	K YD ALDFZ'NS	132,143,429	59,272,955	111,656,439	69,962,464	78,810,763	451,846,050
	G]LS)/F ALDFZ'NS	969,051,816	258,547,269	76,762,876	58,297,957	7,747,996	1,370,407,914
	HDDF ALDFZ'NS	1,101,195,245	317,820,224	188,419,315	128,260,421	86,558,759	1,822,253,964
60+61	K YD ALDFZ'NS	150,847,214	59,266,315	162,495,419	116,462,805	251,196,426	740,268,179
	G]LS)/F ALDFZ'NS	1,106,212,904	247,041,575	168,623,310	149,580,378	79,127,301	1,750,585,468
	HDDF ALDFZ'NS	1,257,060,118	306,307,890	331,118,729	266,043,183	330,323,727	2,490,853,647
61+62	K YD ALDFZ'NS	147,717,434	86,295,475	172,992,241	123,606,079	346,190,515	876,801,744
	G]LS)/F ALDFZ'NS	1,083,261,184	309,404,813	292,650,003	275,435,297	301,967,059	2,262,718,356
	HDDF ALDFZ'NS	1,230,978,618	395,700,288	465,642,244	399,043,376	648,157,574	3,139,520,100
62+63	K YD ALDFZ'NS	144,875,066	75,511,771	153,820,190	145,367,903	398,915,320	918,490,250
	G]LS)/F ALDFZ'NS	1,062,417,152	359,725,137	422,986,554	397,523,624	569,082,396	2,811,734,863
	HDDF ALDFZ'NS	1,207,292,218	435,236,908	576,806,744	542,891,527	967,997,716	3,730,225,113

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Ps emnsM

ANNEX VII

**hLjg aLdf Aoj;fo tkm{af6 ePsf] nufgL
-cf=a=)%*÷%(b]lv)^ @÷^# ;Ddsf]_ -?=s/f]8df_**

SDKGLSF] GFD	LJJ)F	2058+59	2059+60	2060+61	2061+62	2062+63
/FLI^<O ALDF ;:YFG*	/FLI^<O JRTKQ+C)FKQ	120=07	138=08	161=55	184=17	201=08
	D*@TL VFTF	456=66	525=16	614=23	700=46	764=78
	CGO	0=52	0=53	0=91	0=80	0=81
	HDDF	577=25	663=77	776=69	885=43	966=67
G]ZGN NFO{KM O=S+=LN=	/FLI^<O JRTKQ+C)FKQ	7=17	19=13	17=43	21=72	25=63
	D*@TL VFTF	71=52	70=95	80=22	100=54	118=60
	CGO	4=79	9=12	39=43	62=85	59=54
	HDDF	83=47	99=20	137=08	185=11	203=76
G]KEN NFOKM O=S+=LN=	/FLI^<O JRTKQ+C)FKQ		11=30	22=82	23=74	24=06
	D*@TL VFTF	18=00	35=22	45=50	59=82	98=10
	CGO		9=71	14=60	22=54	36=32
	HDDF	18=00	56=24	82=92	106=10	158=48
NFOKM O=SKF]{/ZG -G]KEN_ LN=	/FLI^<O JRTKQ+C)FKQ	-	9=89	12=84	14=07	14=07
	D*@TL VFTF	19=00	25=50	38=65	60=50	86=40
	CGO	0=80	1=49	5=32	14=45	35=02
	HDDF	19=80	36=88	56=81	89=02	135=49
CD]LSG NFOKM O=S+= (ALICO)	/FLI^<O JRTKQ+C)FKQ		0=91	22=18	70=12	10=35
	D*@TL VFTF					
	CGO	4=96	8=32	8=31	4=66	135=66
	HDDF	4=96	9=23	30=49	74=78	146=01
HDDF	/FLI^<O JRTKQ+C)FKQ	127=24	179=31	236=81	313=81	275=18
	D*@TL VFTF	565=18	656=84	778=60	921=32	1,067=88
	CGO	11=07	29=17	68=58	105=30	267=35
	HDDF	703=49	865=32	1,083=99	1,340=43	1,610=41

***cg'dflgt (;|f]t M aLdf ;ldlt)**