CHAPTER – I INTRODUCTION

1.1 Background of the Study

The word "Risk" is a buzzword pounced by the people from every nook and corner of the world. Generally risk refers to the exposure of peril, possibility of suffering loss or injury, chances of meeting dangerous situation. Human life and material possessions are continually exposed to loss or damage by numerous destructive forces, which create great uncertainty in life, in commerce, in industry etc. It is an undisputed fact that the risk is undeniable in the modern complex life and society. More specifically risk denotes the uncertainty of loss. Uncertainty refers to the unknown future outcome or result of an event. 'Risk' is a blessing because it gives rise to discussion, hope, planning accomplishment and progress. It is a curse in so far as it gives rise to dispute, fear, defensive tactics, failure and retrogression. The uncertainty about future is basic universal fact of human life or earth.

In the 21^{1st} century the world suffers from competition. So the existence of organized financial market and capital market within the boundary of a nation is regarded as an essence for the development of a country. The government firm and individual agencies play vital role in the financial and capital market through investing collected resources within the recognized and national sector like productive industry and financial area expecting reasonable benefit for them.

No human activity is free from risk. Moreover, sophisticated scientific innovations, escalating violence and terrorism have made risk a glaring critical issue. In this context the idea of risk management and the idea of the insurance have emerged. Insurance plays a significant role in risk management. Insurance is devised as a financial security against risk. The wheel of development is accelerated by industrialization and industrialization is possible only with the support of two big institutions - banking and insurance. The one pillar, banking provides capital and helps in the financial transaction of business in many ways. Another, pillar insurance offers a high economic relief to different types of industrialist, businessmen and individuals. Insurance has become the pillar of alertness, courage and eagerness to develop the life and living standard of common people, industrialist and traders of today's world. Insurance has been introduced to safeguard the interest of people from uncertainty by providing certainty of payment at a given contingency. Insurance companies are integrated part of the same business. These two are the two wheels of a cart. In the absence of one, the other cannot function. Insurance is equally important for common people and businessmen. It is part and parcel of the business houses.

The insurance market in global perspective has been an important ingredient for economic development. In advance countries, Insurance companies have played a very significant intermediaries role in mobilizing funds through the prudential combination of investment portfolio. 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 of life and nonlife sectors in the economy. This can be done with proper and optimal combination of risks as an organized method of dealing with pure risks to which individual, family, firm or other organizations are exposed. Insurance is a social device, which combines the risk of individuals into a group, using funds contributed by members of the group to pay for losses.

1.2 Focus of the Study

Investment is one of the major parts of all financial institutions. All financial companies invest their excess fund to the desirable sector with profit motive. Investment means outflow of the fund at adjustable return. Investment may be

defined broadly as the employment of capital with the aim of producing again in the shape of income or appreciation in value or both (*Dowry and Fuller*, 1950: 5).

Investment is required to both new and established companies. Generally, the organizations use their fund to owned land, building, machines etc. But it is not only sufficient; there are so many sectors to invest for a business firm. Investment is the use of resources, particularly the financial resource, with the aim of reproducing in the firm of future income or appreciation in the value of the resources or some times.

Investment is the source of capital formation as well as gain return. Every organization invests their fund with profit motive. Because all financial institution and intermediaries require working capital and certain current assets to run and operate their organization, so most of the financial organizations collect a required the return of their investment.

For the purpose of investing, investment pattern is the formulation of the investment strategy based upon the organizational and financial character of the particular firm itself. It will be the primary decision of selecting the proper investment sector based upon single or joint consideration of safety, liquidity, marketability, profitability, and stability or else. Usually, such investment pattern aims at arriving at the optimized or agreed mixture of risk return from the investment.

We know insurance company is also one kind of the financial institution. Since it is also involved in financial activities, insurance company collects fund as premium and make investment. Premium means a certain charged amount, which is paid by the insured to the insurer for bearing risk and uncertainty. Premium is of two types- Net premium and gross premium. The two premiums are further subdivided into two parts. They are single premium and level premium. Usually the insurance companies follow only one premium types with accordance to their nature and corporate objective. This study is concentrated on the premium collection and investment position and aimed at evaluating and analyzing the premium collection trend and investment.

1.3 Statement of the Problem

Nepalese insurance companies are successful public enterprise of Nepal, which are still running in the insurance business without suffering any losses from the date of establishment till now. Subsequently today there are 25 insurance companies operating their service and activities. Nowadays, international insurance companies are also opening in our country to participate in insurance business. An overlook on the balance sheet and profit and loss account of insurance company reflects that the company is earning profit each year; however it is not significant and satisfactory against the volume of transaction. There are number of constraints that hinder the development of insurance. Limited market opportunities, low per capita income and lack of knowledge of insurance poses a serious threat to the insurance business in Nepal. The competition in the insurance business has become more intense. Moreover, increasing violence and terrorism has been threading the insurance business. Therefore the insurance companies should be very much cautious about their business operation.

The big problem of such institution is to collect premium and mobilize in suitable sector. Nepal is an underdeveloped country and more than 70% of people live in village and more than 40% are illiterate. The geographical situation also does not favor for the expansion of insurance activities. Most of Nepalese people do not have faith on insurance and also do not have living standard to get insurance services. Poverty is also the main cause in dropping the insurance business. The main problem of this insurance company is finance and collection of premium fund. Finance means the source of funds and its proper utilization. This study aims

to analyze and find out answers through various methods of analysis and techniques. Specifically, the main issues of the study are as follows:

What is the position of the premium collection at present situation?

J Is the firm able to collect the target premium amount?

- Which sectors are suitable for the purpose of investing to the insurer?
- What are the future predictions regarding premium collection and investment?
-) Is the present investment able to gain desired return?

1.4 Objectives of the Study

The basic aim of this study is to define current situation of Prudential Insurance Company Ltd and find out the premium collection and investment position of it. Here it lays the specific objectives of this study.

-) To show the trend of insurance premium collection and claim settlements.
-) To show the investment position of Prudential Insurance Co. Ltd .through the use of appropriate research tools.
-) To provide appropriate suggestions & recommendations.
- J

1.5 Significance of the Study

Insurance is a legal contract that protects people from financial cost resulting from loss of health, loss of life, law suit or property damage. It provides means for individuals or societies to cope with some of the risks faced in everyday life. People purchase contract of insurance called policies from a variety of insurance organization. Almost everyone living in modern industrialized countries buys insurance. For instance, law in most states requires people who own a car to buy insurance before driving it on a public road. Lenders require anyone who finances to purchase home or car with borrowed money to insure that property. Business take out life insurance on each other to make sure that the business will succeed even if one of the partners dies.

The process of insurance has been involved to safeguard the interest of people from uncertainty by providing certainty of payment at a given contingency. It doesn't serve the end of individuals but tend to spread through and to transform our modern social order. From an institutional viewpoint, the insurance companies are primarily aimed at providing the security against definite risk for an individual or organization. However, as supplementary to their basic aim the insurance perform as the financial intermediaries too. The insurer will have a huge amount to invest, which they collect as individual savings or as the cost of being insured. So, the study analyses the premium collection and investment pattern. This will show the fund's actual scenario. Insurance company need to soundly mobilize its collected fund. Thus, it would be better to evaluate the condition of premium collection and investment pattern of the company. It is also needed to disclose the utility of insurance in Nepalese prospects. This study will highlight the investment sector of insurance fund, policy of insurance scenario of premium collection and investment too. It is the study on collected premium under various policies which put light on what are the weaknesses and how to improve them? The study is important itself because it is the study of the heart of insurance system.

Now-a-days, insurance is a common business, but the concept of insurance is not that old in Nepal. Liberal economic policy has been adopted and government has emphasized on privatization policy. When the policy breaks the monopoly system it brings competition in insurance business. Hence, so many private insurance companies have been opening up with cut throat competition in this sector. Because of such types of competition, management has to be made more efficient; and the 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 motivated to insure. For seeing this fact, this study concerns on analyzing about premium collection and investment related matters among the insurers, which is beneficial to insurance business.

1.6 Limitation of the Study

The study aims at findings the facts and the trend or pattern of the investment and premium collection of Prudential Insurance Company Ltd. During the report preparation there were some boundaries which cannot be ignored. These boundaries are called as the limitations of the study. Following are the limitations of the study.

-) It includes the premium collection and investment position of Prudential Insurance Company Ltd only for the period of 5 years.
-) The whole study is based on the secondary data which are collected from the annual report, reports of Insurance Board, books, journal, articles and other available records.
-) This study covers only the area of premium collection and investment.

1.7 Organization of the Study

The research study has been organized into five chapters namely.

Chapter-I Introduction

The introduction chapter provides general information and concepts of insurance, premium collection and investment. This chapter gives a brief picture of what is going to be studied, why the study is important and what are the limitations of the study.

Chapter - II Conceptual Framework & Review of Literature

Review of literature deals with the general information related to the study. It deals with the theoretical concept of insurance premium collection and Investment. This chapter gives definition, meaning and need of premium collection and investment in the Insurance Industry.

In this chapter, I have included and discussed couples of articles written by the foreign experts in the related field (Insurance), which will further throw some more light in the understanding of the related subject vividly. All the articles that I have so selected shall put some light into different facets of the insurance sector.

Chapter - III Research Methodology

For any type of study, a sound research methodology is necessary. 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 of data. It is careful search or inquiry into any subject matter, which is an endeavor to discover of find out valuable facts which would be useful for further application or utilization.

Research Methodology refers to the conceptual structure with in which the research is being conducted. It is a way to solve the research problem systematically. It facility the research work and brings reliabilities the research work and validity on it. It discusses the procedure employed on study including data collection and analysis. A research work should follow the scientific methods while collecting the data and analyzing them.

Chapter - IV Data Presentation and Analysis

It deals with the issues identified in the introduction chapter. This is the major part of the whole study in which collected data are analyzed and interpreted by the help of the financial and statistical tools. Major findings of the study are also discussed in this chapter.

Chapter-V Summary, Conclusion & Recommendations

This is concerned with the summary, conclusions and recommendations. This is suggestive to all the concerned authorities and the researchers. Conclusion of the whole study is in this chapter.

CHAPTER – II CONCEPTUAL FRAMEWORK & REVIEW OF LITERATURE

This chapter includes the illustration of insurance, premium collection and investment positions. This chapter is divided into two parts: Conceptual framework and review of the previous research. Conceptual framework includes the generally accepted theories and review of the previous research includes the brief review of previously conducted studies related to the study.

2.1 Conceptual Framework

The world today is full of risk. Moreover, the development of sophisticated technology and different scientific innovation has changed the human life. It has made the whole world a global village. But it has also increased a great deal of risk. Some sort of risk is beyond the human control. To reduce such type of risk, the idea of insurance is developed. Insurance is a way of reducing uncertainty of future outcome. It provides financial security against risk. Before getting into the concept of insurance and its major areas one must be clear to understand the risk and risk management.

Risk

Risk means uncertainty about future losses, or in other word, the inability to predict the occurrence or size of loss. In general risk can be defined as the probability of the occurrence of unfavorable outcomes. There are different meanings of risk. It can be defined as statistical terms and in insurance terms too. In the context of insurance, it takes uncertainty of occurrence of economic loss. Thus, people who want to safeguard lay insuring them to the insurance companies.

Risk, as a term, will be the composite of perils, loss and hazard which are the intimate parts of the term risk.

Peril

A peril is the cause of loss. Peril will be the matter that is capable of causing loss to the physical or human condition. Peril may be in the form of wind storm, explosion, collision, pre-mature death, accidents etc.

Loss

Loss is an untimely decline in value or disappearance of value; it is the undesirable result of risk, usually in an unexpected or least relatively unpredictable manner.

Hazard

The acts or condition that increases the likelihood of a loss is termed as hazard. It may be the condition that may create or increase the chance of loss from a given peril.

Risk Management

After having the concept of risk it is important to know about risk management. Risk management is the systematic and efficient handling of pure risks. In simple words, risk management is the planning, organizing, directing, controlling process of risk. In practice risk management is the device and process of decision making for either personnel or organizational risky situation. Risk management is a "general management function that seeks to identify, assess and address the cause and effect of uncertainty and risk of an organization. The purpose of risk management is to enable an organization to progress toward its goals and objectives in the most desirable, efficient and effective path" (*Smith Williams and Young, 1995: 27*).

2.1.1 Meaning of Insurance

"It is quite hard to define insurance to satisfy every viewpoint of insurance. Insurance; may be defined as a system of combining many loss exposures with the cost of the losses being shared by all of the Participants" (*Crane, 1980: 8*). Insurance can be explained as a social device to accumulate funds to meet the uncertain losses arising through a certain risk to a person insured against the risk. In some generic terms, insurance is regarded as "co-operative risk carrying", transfer of specializing risk carriers," redistribution of actual loss etc. 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 risks that attach to as individuals (*Merge, 1959:2*).

For the economic growth of a country insurance provides strong hands and minds, protection against loss of property and adequate capital to produce more wealth. Through prevention of economic loss insurance protects the security against degradation. Thus, the potential human and property resource are well protected in present and future by insurance.

Insurance works as a co-operative devise to spread the loss caused by a particular risk over a number of persons who are exposed to it and who agree to ensure themselves against that risk. Insurance gives relief from the risk. It performs the task of paying compensation for financial loss under the insurance, in return of little fixed amount if loss or damage has taken place. W.D Dinsdase stated the meaning of insurance as a means of spreading risk over the many losses, which would otherwise be borne by the individual it provides, in effect a pool to which many contributions, out of which the few who suffer losses are compensated.

According to nature, characteristics and objectives of the insurance company, they are also referred to as financial intermediaries. Hence, insurance industry, a composite structure of insurance companies, is regarded as financial institution bearing very difficult characters among very financial institutions and intermediaries." It may be an economic system of reducing risk through transfer and pending of losses. A legal method of transforming risk in a contract of indemnity, a business institution providing many jobs in a free enterprise economy, a social device in which the losses of few are paid by many, or as actuarial system of applied mathematics" (*Bickihaup*;1983:43).

Insurance companies are capable of providing industrial finance, government finance or even personal finance. They provide different finance through their own investment policy and pattern based upon their own corporate objective and nature of the line of insurance business. 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 client (people and organization) as premium. Therefore, all the insurance companies are responsible for their client's interest. This study looks and analyses insurance company's premium collection and investment situation. Everyone pays a premium those who suffer a loss are paid a sum of equivalent to loss (loss according to the term of contract) and those who don't suffer loss by the premium paid. The protection against unforeseen events is purchased through a contract of insurance.

From the above mentioned definition it is clear that the insurance reduces the risk and provides financial security in return of payment of a certain amount. Insurance is a powerful weapon to manage risk.

2.1.2History of Insurance

The term of insurance developed through the faith and co-operation. The origin of insurance is lost in antiquity. Evidence is on record that arrangements embodying the idea of insurance were made in Bobylonia and India at quite an early period. In Rig-Veda, the most sacred book of Hindus, reference were made in the concept 'yogkshema' more or less akin to the wellbeing and security of the people. The codes of Hammurabi and of Manu had recognized the advisability of provision for sharing the future losses. However, there is no evidence that insurance in its present from was practiced prior to the twelfth century.

The earliest traces of insurance in the ancient world are found in the form of marine trade loans or carriers contract, which included an element of insurance. Evidence shows that the marine insurance is the oldest from of insurance. Travelers by sea and land were very much exposed to the risk of losing their vessels and merchandise because the piracies on the open seas and highway robbery of caravans were very common. Besides, there were several risks. The risk to owners of such ships was enormous and, therefore, to safeguard them, which could not be conveniently borne by the unfortunate individual victim. The co-operative devices were quite voluntary in the beginning, but the insurance development was not confined to the Lombard's and to the Hansa merchants, it spread throughout Spain, Portugal, France, Holland and England.

After marine insurance, fire insurance developed in its present form. It originated in Germany in beginning of the sixteen- century. It got momentum in England after the great fire in 1966 when the fire losses were tremendous. Gradually all the types of insurance were developed at this form.

In the Context of Nepal

In our country, the concept of insurance can be traced down to the 'Guthi Systems' and joint family culture that has been prevalent since the ancient times. These systems have provided security and assistance to individuals and families in time of need. With the change in the economic and social perspectives and the increasing complexities of the up-coming 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 in an agricultural basis and the socio-economic organization took care of any problem or calamity confronted to the community.

Before the emergence of insurance company in Nepal, there were several broker offices of Indian company operating in Nepal. The first insurance company in Nepal was Nepal Malchalani Tatha Beema Company Ltd, which was established in 1947 A.D. as a subsidiary Company of Nepal Bank Limited, the first commercial Bank of Nepal. The main objective of that company was to transport the goods imported by the bank and to keep the goods in its custody. The company took responsibility of cash transaction of the bank. After sometimes, the company changed its name from Nepal Malchalani Tatha Beema Company Ltd to Nepal Insurance and Transport Company Ltd.

Transporting goods and issuing insurance policies were the core objectives of Nepal Insurance and Transport Company Ltd. but it mainly concentrated only on insurance sector. So again, it changed its name and became Nepal Insurance Company Limited. Even though Nepal Insurance Company Limited was established to sell insurance, it was reluctant to accept other business except Nepal Bank Ltd. Since foreign (Indian) insurance Companies were still transacting insurance business through their broker offices in Kathmandu and other branches in major cities in Nepal before and after establishment of Nepal Insurance Company Limited.

After the restoration of Democracy in 1990 A.D., Insurance environment began to change simultaneously along with other factors. Thus to meet the requirement of the changing situation Insurance Act 1968 was repelled by new Insurance Act 1992 (Beema Ain 2049 B S). The preamble of the act clearly states the purpose of the act. An insurance Board was established to Systematize, regularize and develop the insurance business. To achieve the goal as stated in the preamble, Beema Samiti (Insurance Board) was formed as an autonomous body under the

Insurance Act of 1992 A.D under the direct supervision of the government. After the introduction of Insurance Act, 1992, the number of private insurance companies came into existence. There are altogether 25 Insurance companies functioning in Nepal both in life and non-life insurance business in Nepal.

2.1.3 Development of Insurance

First Phase: Emergence of Marine Insurance

After the emergence of the concept of insurance, it was most commonly used for marine insurance. So, marine insurance is the first modern form of insurance in the history of insurance. In 1300 A.D. the first insurance contract called: polizza was made in Italy. Later on the word "policy" was developed from "polizza". The concept of marine insurance was commonly used in Lombard of Italy and in Venice in 14 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 were banished, and then settled in different countries of Europe. The name of street," Lombard street" of London was named after the name Lombard. At that time this street was called the central point of the marine insurance.

The significant role of Liyod institution for the development of insurance cannot 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 Edberd Liyod in the tower of street of England. Slowly the coffee house was successful to introduce itself as a centre of marine insurance. The Liyod institutions established in 1771, is the first institution to make formal marine insurance. Till now, this institution is the one 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 the insurance to provide security to their lives. To talk about the modern life

insurance, by an associate 16 persons, the first life insurance policy of the world was issued in the name of a person named "William Gybbons" in 1583 A.D. It is recorded that insurance policy was issued for one year. One astronomer named: "Admand Heley" submitted a 'Mortal Table' in 1693 A.D. to the royal security. This mortal table was useful tool for calculating insured amount and the first time life insurance institution insured amount technology on the basis of data.

In 1744 A.D. passing the life insurance Act created the foundation of the modern insurance. Thereafter different laws later removed the defects that came to the business. Many companies were closed and some of them went and mixing or merging with another insurance company. 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 19 century many life insurance were that already established in the world. We find that the life insurance business in our neighboring country India had started with the establishment of the Mutual Association. In 1971, both life and the non-life insurance were nationalized in India; as a result, the Life Insurance Corporation for life and general insurance company ltd for non-life insurance were established. During the region of Elizabeth 1 the life insurance automatically used to be cancelled. But the job of effecting long term insurance, started from 18 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 fire insurance had come after marines insurance. The function of the fire insurance was done in 14th century. The beginning of the fire insurance for the first time can be found in the municipality of the city of Hamburg in Germany in about 13 century, it is said that after the birth of life insurance the fire insurance was developed.

In 1666 A.D. after the fierce incident, many buildings were turned into ash in England. It is known from the history of insurance that many people were in difficulties. So, the fire insurance was introduced with the main objective of the providing the financial protection to the people to save from the risk and the ruin. In 1680 A.D. Dr. Nicholas Barbon started the fire business related with the fire insurance in England. The office of Barbon was called the fire office, later name as Phoenix Insurance Company was established with the development of the fire insurance today many people, industry and businessmen are breathing the air of the pace.

Fourth Phase: Practice of Miscellaneous Insurance

After the fire insurance, many other types of insurance came in use. Thus, by such insurance policies man is trying to be protected from many types of risks. Under the miscellaneous insurance, fidelity guarantee insurance started from 1848, personal accident insurance from 1880 liability insurance from 1875, public liability insurance from 1877, burglar and house breaking insurance from 1903, motor insurance from 1911, and aviation insurance came in practice, earthquake insurance, the vocal of the male singer and female singer, model beauty as miscellaneous insurance.

2.1.4 Types of Insurance

Insurance has been the most effective and strongest to save people property. It makes the security for the payment of the insured amount those who have made life and non-life insurance. Nowadays, insurance has become the pillar of alertness, courage and eagerness to develop the life and living standard of the common people, industrialists and traders of the world. When insurance defined in the generic concept, it will take the form like social insurance and private insurance. But we have divided the insurance into two parts as life insurance and general insurance. Life insurance may be defined as the contract, whereby 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 the fixed period. Life insurance is concerned only about physical and mental accident risk. General insurance considers all insurance except life insurance. However, we can classify the insurance as a life insurance and non-life insurance. Some of the experts and writers separate the insurance in different viewpoint i.e., from the potential insurance will take two broad forms as life and non-life insurance. We can view all the insurance under risk point of view in following way.



Kinds of Insurance from Risk Point of View

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 type of insurance plan conducted by the insurers which is directly related with providing assurance against the economic part of total human life. It is financial instrument for providing post death resources to support survivors or pay obligations of the state of the deceased. "Life insurance contract may be defined as the contract, whereby 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" (*Mishra, 1997: 49*).

Since the earning power of an individual is the greatest assets a person does have, it really will be the most important part of human life. 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 the death of a person once born. Life insurance only provides assurance against unseen future accident and it helps to live comfortably in retirement life. Life insurance is written to economically protect the insured against financial loss in the circumstances like living up to the age of retirement when he will not have potential earning power, protecting insured's beneficiary if the untimely death of the insured took place, or protecting the interest of the other parties like insured's creditor who are economically associated with the life of the insured. Life insurance provides a protection for two major contingencies. A man insures his life either to make provision for leaving a certain sum for his dependents when he dies, which may happen he is able to say and accumulated sufficient amount. Life insurance has several business and financial advantage. In life insurance it is provided that the insured interest amount is to become payable in the happening of death or in some cases on the attainment of certain age, whichever is earlier. The

concept of Life Insurance is based on pooling the risks of many to a group, accumulating a fund by contribution from the members of the group and paying from this fund the losses of those who suffers loss.

Non-life Insurance

Insurance, other than life and social insurance are called non-life or general insurance. The subject matter affected under it is in nature of property. The insurance company provides indemnity to the insured. Such compensation should be based on the actual value. Non-life insurance is also known as general insurance. It is a pure insurance because it can measure any risk in terms of money. General insurance is the insurance of property and liabilities risks 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 risk through certain sum of money. This part of insurance includes the insurance and risk transfer of the property and liability of the insured where, "property insurance against loss arising from the ownership or use of the property, include two general classifications. The first, indemnifies- the insured in the event of loss growing out of damages too or destruction of his /her 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". General insurance is responsible to payment of an amount to the insured. But when the incident is held by negligence of insured, the insurer is not responsible to pay any amount against risk. The insurers providing various kinds of non-life insurance policies are as follows -

Marine Insurance Policy

The oldest form of insurance, the marine insurance policy will be written to provide the security against the perils of sea. Ships sailing on are exposed to various kinds of risk. They may colloid against one another, spring a leak, caught by fire, captured enemies and seized by pirates. The ship and cargo may be lost in such a case and a tremendous loss may be caused to its owners. Such risks if not covered will greatly discourage the international trade, which is mostly sea borne. That is why the marine insurance is considered to be the land mind of modern international trade, which is indispensable auxiliary. The modified modern insurance policy provides the protection against various risks which does not belong to sea. The modern insurance policy provides the protection against inland transit loss, which is arising in the way to seller and buyer, and protection against loading and unloading also. In practice we can see following insurance policy under marine insurance: a) Ship insurance b) cargo insurance c) Freight insurance.

Fire Insurance

Fire insurance had been originated in Germany in the beginning of sixteenth century. Fire insurance policies are issued to indemnity owners of property, whether buildings or contents, against destruction or damage caused by fire and lightening. In generic form fire insurance provides indemnity for loss or damage caused by fire. "Basic form of fire insurance offers protection to the insured against the destruction of physical property as a result of fire (*Welshman and Melcher*, 1980:213).

Fire insurance policy may be taken on residential houses or on factories and business premises. Under fire insurance policy, if any property lost by fire the insured amount would pay as indemnity. The property should be in its full market value. The claim under the fire insurance policy is determined on the basis of present value of property. The field of fire insurance can be modified or extended to include a number of peril closely allied to fire like wind , storm, earthquake, riot and strike, damage, terrorism, explosion, landslide or else. Insurer may charge higher premium as per the nature of risk and insurance policy.

Aviation Insurance Policy

Aviation insurance is related the risk occurring due to peril, hazards 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 of an aircraft. The subject matter of this type of insurance will be aircraft itself, which require very huge capital investment. Aviation insurance requires the risk of passenger, cargo, hull (plane) also. The Aviation Insurance is essential and important in aviation field. Because of huge capital outlay, individual organization operating the airlines business could not bear the risk associated with the aircraft and the insurance companies particularly form a syndicate to bear the risk associated.

Automobile Insurance Policy

Automobile insurance policy is related to the risk of vehicles. It provides certainty against the risk of accident. It is the insurance policy related to the vehicles running on the road. It is directly related with providing the insurance against the peril or loss occurring with respect to vehicle and with providing financial assistance to the insured to remit the third party liability occurring to the damage caused by the vehicle. The Aviation insurance covers the full comprehensive policy and third party liability insurance too.

Engineering Insurance Policy

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

Boiler Insurance

Usually, all the big and small industry has installed the boiler machine to produce steam power. Under this arrangement, the risk occurring due to explosion or damage of industrial boiler will be insured. Where the boilers are used, there is always the possibility of explosion or breakdown. Therefore, the boiler owner wants to get protection of such types of risk. In such breakdowns the person may be injured or the property may be destroyed. At that condition boiler insurance provides the protection against the risks of boiler.

Contractors All Risk Insurance

Under this arrangement the hazards, perils and losses occurring from the mutually accepted risk class will be provided for the contractors, whether they are individuals or organizations. Under this risk class the loss occurring from natural disasters, accidents or other inevitable uncertainties will be incepted. It insures the contractors or builders financial instability though there incur heavy losses on contract, upon which they are working.

Machinery and All Insurer Risk Insurance

Under this arrangement the loss occurring due to the damage of the machinery will be insured. Under this insurance an insured assure his/her machinery against the risk of breakdown and failure. When the machine is broken-down at that situation s/he has to bear the losses of worker wages and repairing cost too. But the machinery all risk insurance provides the certainty against such types of risk. Such policy includes financing for the failed machinery, providing financial security against the indirect cost like repairing cost, cost of the idle workers or similar losses.

Miscellaneous Insurance Policy

There exists many insurance covering different fields of risk classes. " A number of coverage" written by 'causality insurers' are available that cannot 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 (*Maher & Cammack, 1974:344*).

Under this the insurers are ready to provide new kinds of insurance plans, there doesn't exit the limit on the kinds of insurance policies written.

Household Policy

Under this policy insurer writes the insurance against the risk of personal house/building and other properties. In this policy, the loss occurred due to the natural disaster like earthquakes windstorm, lightening and the loss occurred due to the other disasters like earthquake windstorm, lightening and the loss occurred due to the other disasters like vandalism; riot is financially protected from the insurer if this insurance policy is written.

Medical Aid Scheme Insurance

Under this policy insurer provides the financial support against the heath 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 insurance written period.

Fidelity Guarantee Insurance

The word stays at the faith. But the fidelity guarantee insurance is attended in the case of fraud and dishonesty. Under this policy the owner of the firm, organization gets the guarantee against the fraud or betrays or dishonesty caused by the employees like accountants, cashiers distributors etc. The insurer fulfills the loss occurring due to the discard of the fidelity of the beloved person " banks saving and loan associations, and other business in which employees have access to large

sums of money in variably carry fidelity bonds for protection (Welshman and Melicher, 1980:214).

Workmen's Compensation and Employers Liability Insurance

This insurance is a means of motivation to the worker because a firm/organization gives indemnity to the worker if they get occupational accident. For this purpose, the owner of the firm on behalf of the worker will purchase workmen's compensation and employer's liability insurance. In this policy the insurer provides the financial support if the worker meets with the accident within the working place and time. This scheme will be written by the owner of the firm to secure from the unexpected claims occurring due to the occupational accident that took place on the work place. "Workmen's compensation and employers liability insurance assumes the expenses of compensation and provide for medical, surgical and hospitalization requirements as determined by the compensation laws of the state".

2.1.5 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 is calculated under different method as considering different affected factor. : "premium can be ascertained either by numerical rating system, evaluating each and every item and marks are assigned to them according to their merits and degrees of influencing risk" (*Robinson and Wrights Man*, 1968:87).

In fire insurance rates are quoted on per mille basis and are applied to the sum insured to produce the premium. In marine cargo insurance and burglary, the rates are quoted on percent basis. In workmen's compensation insurance rates are quoted on per mille basis and are calculated on the wage roll of employees. In the motor vehicle insurance, the method of premium calculation varies according to the types of vehicle and the type of cover. The premium is based on the cubic capacity of the vehicle, estimated value of the vehicle and the geographical area in which it is used. The third party liability policies are rated only according to the cubic capacity of the vehicle. 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 expenses and written time period.

2.1.6 Investment

General investment means to flow cash in different sectors at profit motive. Investment in its broadest sense means the sacrifice of certain present value for (possibly uncertain) future value. In pure financial sense "the subsequent use of the term investment will be 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 payments or the participation in expected profits" (*Dowrie and Fulle, 1950: 6*).

Collecting the premium from the clients by issuing the insurance policies is one of the most important functions of any insurance companies. The main sources of fund are premium and the income from the investment. Premium collection and investment are the main functions of every insurance company. So success and failure of the insurance company depends upon these two tasks. Premium is calculated by the insurance company under the tariff by insurance board. The tariff is fixed by observing risks involve in that insured. Here applies higher the risks higher the premium.

Insurance is a double edged weapon. On one hand it provides capacity to the financial security against future losses and on the other hand it provides security to the business. In other words insurance is one kind of security in a real sense. The industrial and commercial development is not possible unless they get a type of security, their capacity would be idle and unproductive if kept in a vault. The

investment opportunities would be the other hand, make it possible for the industrialists and businessmen to reap good profits.

Mainly there are two types of insurance business in insurance market in Nepal: Life and non-life insurance business. Life insurance premium is refundable but the non-life insurance premium is non- refundable to the insured. Life insurance company refunds the insurance premium to the insured with bonus in a certain agreed time period.

Insurance companies have at their disposal large amount of money. This arises from the fact that there is time gap between the receipt of premium and the payment of claim. The premium may be collected in Shrawan and claim may not occur until Ashad. This money is invested in a wide range of different forms of investment as prescribed in Insurance Act 2049. Investment can be calculated from the following formulae;

Investment = Premium Collection – Claims Paid-Survey Fee-Agency Expenses

Insurance Act has fixed the general business (non-life) insurance companies investment of 65 % funds in compulsory sectors and 35 % on the other sectors. Among the compulsory sectors, 15 % of investment should be in Nepal Rastra Bank Bond, 50 % on commercial and development bank, and out of other sectors, 15 % on finance company and rest of 20 % on the other sectors (share, bonds of public limited company)

Investment as a term is quite confusing and multi-faceted. We can define the terms of investment at manufacturing and trading forms "those long term expenditures that aim at increasing plant capacity of efficiency or at building up goodwill, there by producing an increased return over a period".

Experts define the terms of investment from economic viewpoint that "investment as a productive process by means of which additional are made to capital equipment. 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.

For the study of financial institution, the investment and investment problem will revolve 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 so 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 to be a procedural task. It must follow a definite investment process. This definitely begins from the formulation of proper investment policy.

Since we are dealing with the insurers whose primary function is to accept other risk against some benefits in the form of the premium, the investment problem will be the employment of available fund. Such fund will be the portion of others claims over them and it should be invested with the objective of attaining the gain whether in the shape of income or appreciation in value. The insurance companies handle investment management as secondary function or a supplementary of its major function. Therefore, they need to coincide with the insurance business and investment management. Since they trade on the claims of others, their investment management must enhance the benefit of their policyholders, too. The policyholders expect to get the enhanced level of benefit from the insurer, which otherwise could not have been possible if they individually involved into saving-investment process, which is quiet reasonable and rational too.

Though the insurers have advantage of investing the individual saving collectively, they cannot invest all their above mentioned inflows, as 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 investable fund after arranging for various items.

Usually, from the above mentioned inflows the insurer has to invest a portion of capital i.e, owner's equity or corporate capital component of the fixed assets, which will be the real investment. Then after, the insurer invests a portion of inflow for the current transaction of their business. Usually the such business transaction or spending includes the general business expenses like rent, salary to staffs or else, spending for the non-capital items purchasing required tools, purchasing required stationary or similar else, operating expenses relating to the business line like the commission to the brokers, commission on the re-insurance etc. Then after, insurer needs to arrange for the reserves, which may arise in these forms: policy reserve or unearned premium reserve, loss reserves, other voluntary reserves.

Regarding the arrival of the investable fund, the unearned premium reserve or policy reserve will be a basic one. Because such reserves needs proper treatment to be withdrawn if the insurance policies matures but will ideal if kept within the insurer and it will have to contribute the policyholders account by providing the appreciation in value through the defined rate of return.

Thus, the insurer gets the investible funds after making various provisions, various expenses and other else. Such investible funds includes the claims of the owners, the claims of the policyholders as the premium payments or appreciation in value as interest, the surplus that retains within the firm and other inflows.

2.1.6.1 Investment Policy

Generally, policy will be a plan or course of future action that are proposed to be adopted, regarding a particular field of activities. Similarly, investment policy will also be the plan or course of future action that are proposed to be adopted regarding the investment. The investment policy varies according to the field of operation relating particular firm or individual. Thus, investment policy will be to formulate the investment strategy based upon own objective and nature of the investible fund and their future use. Such investment policy must be balanced as of the Risk- Return character, where the risk includes the stability in value, liquidity, marketability of the investment or similar inconveniencies caused by the readily unavailability of the fund and return includes the appreciation in value of the investment and the regular income or similar benefits. Investment policy must also concentrate on the component of investment and usually such components will be capital markets instruments like common stocks or bonds and financial/money markers instruments like commercial paper, government securities or some less than one year maturity bonds. Further, the investment policy must also indicate the use of the variable income components or fixed income components where, variable income components are those where neither the principle nor the income are contractually set in advance whereas fixed income components are those which promises a stated amount of income, periodically.

Such investment policy will be the outcome of various interrelated considerations. Regarding the insurance business also, it will be the outcome of various principles of investment that need to be followed.

2.1.6.2 Principles of Investment

Generally, the investment depends upon principles of investment. All financial institution and intermediaries invest their collected funds under investment principles and policies. However, investment policy is reformed and developed

from the principles of investment. Therefore, so many determinants of principle of investment directly affect the investment policy.

Investment policy will be the outcomes of various interrelated considerations. Regarding the insurance business also, it will be the outcomes of various principles and other affecting matters along with the basic principles of investment that need to be followed, because 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 these are the factors to be considered in investment planning decisions- security of principle, stability of income and rate of return, mark ability and liquidity" (*Shim, and Siegel, 1989: 256*).

a. Security of Principle

The safety and security of principle is a primary and basic function of investment policy. The insurer should never invest its fund in these securities, which are subject to too much depreciation and fluctuations because a little different 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. Since the insurers' primary aim will be to provide the "risk financing assurance", they need to be prompt in claim payments. Besides, the insurers mostly trade on others claim over them, especially claims of the equity holders and policyholders. Therefore, they should always be concentrating not to let decrease of go-off the value of their claims. Since investible funds are also derived from the claims of the owners or policyholders, the security of such assets will be an essence to be successful in "risk financing assurance" as well in the "collective savinginvestment process". Regarding the insurance business, this principle is enforced by the federal state laws, to "the basic principles for limiting the investment to those with high margin of safety not only is imposed on the companies by the

system of state investment laws described presently it has long being recognized as paramount consideration by the insurance companies themselves (*Life Insurance Company, 1969: 60*).

To attain the principle of security the investor needs to analyze the portfolio matching thief funds character and the line of insurance business. To maintain the secure investment holding the insurer need to concentrate on the secured landing; which may be against some assets of the borrower or by the illegal consideration. The secured investment provides the good/sweet return and liquid cash flow whenever required. In other instances, the safety of the investment is assured by the high credit standing of the borrower as evidenced by his ability to meet the interest payments or to provide or continuous flow of dividends to investors. Further "the security of investment depends upon the legal claims of the lenders and value of the underlying security but also upon the borrower's ability to manage his affairs efficiently and his willingness as well as ability to repay".

b. Procedures of Investment Collection

Investment policy is the outcome of various considerations. Regarding the insurer, investment policy and selection criteria will be the factors to be considered while investing the investable insurance fund.

Category of	Investment Sector	Investment	Remarks
Investment		Percentage	
	Debentures of Govt. &	In any	
А.	Central Bank or	condition, not	
	Debenture/Saving	less than 15%	
	Certificates guaranteed	of total	
	by Govt.	investment	
		should be	
		invested in	
		Category 'A'.	
	(1) Fixed Deposit of	(1) In any	(1) Maximum of 20% of the
	Commercial Bank	condition, not	total investment amount can be
В.		less than 35%	invested in the fixed deposit of
		of total	the same commercial bank
		investment	which has been in operation for
		amount should	at least 3 years and has done
		be invested in	periodic audit and maximum of
		FD of	5% of the total amount can be
		commercial	invested on the basis of
		banks.	appropriateness in case of the
			commercial bank which has not
			reached 3 years operation.
	(2) Fixed Deposit of	(2) Not more	(2) Maximum of 5% of the total
	Development Bank	than 20% of	investment amount can be
	(3) Investment in	total	invested in the fixed deposit of
	Citizen Investment Trust	investment	the same development bank
	(In Ekanki Nagarik	amount.	which has been in operation for
	Lagani Plan)		at least 3 years and has done
			periodic audit and maximum of
			2% of the total amount can be

Investment Criteria of Non-Life Insures

			invested on the basis of
			appropriateness in case of the
			development bank which has
			not reached 3 years operation.
Compulsory	As specified above	In any condition,	
Investment		not less than	
(A+B)		65% of total	
		investment	
		amount.	
	(1) Preference Shares	(1) Not more	(1) Maximum 5% of total
Optional	(not transferable to	than 10% of	investment amount or 10% of
Investment	ordinary shares),	total	the paid-up capital of banks or
(C)	Secured Debentures &	investment	finance companies, whichever
	Other Debentures of	amount.	is lower can be invested in
	commercial banks,		preference shares (not
	development banks and		transferable to ordinary shares),
	finance companies		secured debentures and other
			debentures of commercial
			banks or development banks or
			finance companies.
	(2) Fixed Deposit of	Not more than	(2) Maximum of 3% of the total
	Finance Company	15% of total	investment amount can be
		investment	invested in the fixed deposit of
		amount.	the same finance company
			which has been in operation for
			at least 5 years and has done
			periodic audit and maximum of
			1% of the total amount can be
			invested on the basis of
			appropriateness in case of the
			finance company which has not

		reached 5 years operation
		reached 5 years operation.
(3) Ordinary Shares of	Not more than	(3) 2% of total investment
Public Limited	5% of total	amount or 10% of the paid-up
Company or Public	investment	capital of the public limited
Limited Housing	amount.	company, whichever is lower
Company		can be invested in ordinary
		shares of public limited
		company.
(4) Ordinary Shares of	Not more than	(4) 2% of total investment
Public Limited	5% of total	amount or 10% of the pre-paid
Company (except above	investment	capital of the public limited
mentioned)	amount.	company, whichever is lower
		can be invested in ordinary
		shares of public limited
		company.

-) In case of term investment, upon maturity, reinvestment should be done as specified above.
-) If debentures of Govt. and Central Bank or debentures/saving certificates guaranteed by Govt. are not available, remaining part of investment to be made in those sectors should be invested in FD of commercial banks and same should be informed to Insurance Board.
-) In case of every new investment and renewal of investment, specified limitations should be followed.
-) Investment should be made for overall benefit of the Insurer.
-) While determining the amount to be invested in FD of banks, the amount deposited in the Call Deposit or any other interest bearing account of the bank should also be counted.
-) While investing as per Insurance Board's directives, it should be done conscientiously and failure to do so will hold the Board of Directors as responsible.
-) Banks scheduled by Nepal Rastra Bank of not having sufficient liquidity should not be invested and should be withdrawn the past investment in those institutions (www.bsib@org.np)

c. Profitability

Generally, the insurance companies or insurer obtain their name and era through paying claim in simple procedure at 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. The funds must be invested in the higher yielding components. The rate of return must be matched with the rate of return to be provided on the policy reserve or simply the externally achieved return must exceed the return to be allocated internally.

"In considering yield in realization to company's operation, it is important to realize that the investment income must provide the addition to policy reserve in accordance with the basis upon which premiums and reserves are calculated and that the effective amount of such income will be partly determined both by the expenses of investment and by capital gains or losses" (*Maclen; 1999: 261*).

The insurer must earn at least the assumed rate of interest otherwise they will suffer loss. The investment should make in such securities, which yield the highest return consistent with the principle of safety. The insurer can reduce his future premiums by earning higher interest and thus, will be able to increase his business. It has been realized that the safety and the profitability principles are opposite to other. Therefore the principle of profitability is important for insurer investment.

d. Diversification

Another principle of the investment will be the diversification of fund. It can be either in the form of diverse components or in the form of different field of business or in the form of different geographical regions. An insurer should be always careful not to grant investment in only one sector. To minimize the risk, an insurer must diversify his/her 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. Diversification can also be a way to achieve safe and secure investment assets. Diversification is needed as an investment principle because such diversification will reduce the risk of being the fund insecure in aggregate and the rate of return can be maintained in a level too.

e. 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. It is the principle required to match the function of insurer as financial institution against the function of insurance service provider. Liquidity represents convertibility of investment into cash without undue loss of capital the insurer needs to maintain working cash and 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, insurer needs to maintain the liquidity at their investment. Beside these, the liquidity will also enable the insurers to catch up the speculative benefits occurring on some special occasion. To maintain the liquidity principles with respect to the investment, the insurer need to concentrate on the

investment companies which holds the property of being very near cash or cash and bank balance. The principle of liquidity is against the principle of profitability, because the idle cash will earn nothing and invested cash will have no liquidity.

f. Marketability

Another important principle of investment for an insurer will be marketability or convertibility. The principle of marketability suggests the insurer to invest in that sector where easy possibility of cash convertibility exists. Insurer may not have any information about the requirements of funds to pay the claim of the insured. So, they need to invest in those sectors where marketability exists. The investible funds will be the claim of policyholders or the owners and they are payable on the specified condition or on the specified time. Generally, such timing or the condition will be uncertain. Therefore, it is not always possible to predict exactly how much fund will be needed to replenish the claims arriving due to uncertainties, thus, it is quite important to concentrate on the marketability with respect to the investment components. Therefore, the convertibility or marketability principal must match with other principle as well as with the line of insurance business and the nature of the required fund.

g. Other Factors Affecting the Investment Policies

Beside above-mentioned basic principles, some basic factors really affect the investment policy and composition of the components. However, their degree of affecting power may vary. These are other factors that have significant affecting power:-

Regulatory Provisions

Regulatory provisions have the maximum impact upon the investment policies and the composition of portfolio. Usually, in every state there will be the legal restrictions for the insurers to invest their funds in various components. Such restriction might be in the form of the limitation of the investible amount on particular securities or the allowed sectors of the investment. The insurer, not being able to revert such provisions, need to revert its policy and composition and hence, the investment policy may be diverted.

Management Perception

Another factor affecting the investment policy and components will be the management's attitude as well as the self-imposed limitation from their side. If management wishes to increase the yield, investment policy will be to divert the fund to the high yielding portfolios, rather than the more safe but low yielding components or vice-versa. Beside this, the management may impose self-limitation of investment components according to the condition of the business and it is also capable of changing the investment portfolio.

Present Composition of the Investment Portfolio

Investment policy and the composition are also affected by the size, maturity stage, interest, or return rate on the capital etc. If the insurer already holds the component having mid-term maturity, then their consideration for upcoming investment will be in the long or short term maturing components. Thus, the compositions of the investment in hand also affect the investment policies of the insurers.

Availability and Accessibility of the Investment Components

When best-suited investment components are not available or accessible, then also the investment policy of an insurer can be affected. When best-suited investment will not be available, then the insurer had to accept next best-suited investment components and the policy differs.

2.1.7 Investment Policies and the Insurers Operating under Difference Insurance Industry

Usually, all the insurers follow the main principle of investment under investment policy. The principle of investment is based on the nature of business and the line of insurance. An insurer has written the different policy in different policy insurance business. Therefore, they include the different investment policy to invest collected fund in accordance to the character, nature and time period of policy. Further, the legal provisions regarding the investment components and enforcement on the kinds of component also affect the investment policies of insurer.

Since the life insurance and general insurance differ in their risk assurance character, their claims, nature, volume and nature of their policy holding of each type, the timing of insurance claims relative to payment of premiums etc., both differs with respect to the investment policy and the choice among the various components of investment. In this study also, both are treated separately.

2.1.7.1 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 claim against them by insurance fund is that they are of the long term nature. The claims against them by the policyholders materialize in 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 for policies but also the demand for the cash surrender value by person canceling their policies or for loans secured by the cash surrender value (*Dowry and Fuller*, 1950: 229).

This aspect of insurance business desires the investment policy, because the fund of life insurance in liability for an insurer. Therefore, insurer has responsibility to invest profitable sector and securely also. Thus, the fundamental purposes of the life insurance investment are: (a) to make possible the fulfillment of contractual obligation to policyholders. (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 responsible income yield (*Magee*, *1959: 743*).

To attain the basic objective and strategy, the insurer should invest the life insurance fund under investment policy.

2.1.7.2 Non- Life Insurance and Investment Policy

The Non-life or property and casualty insurance are the kind of institution, which are specially purposed to transfer the property and liability risk of others against some benefit. "Unlike life insurance companies, Property and Casualty insurance companies do not collect saving, they sell service, and their liability do not represent firms dollar (amount) obligations to policy holders (*Dougall and Gaumnitz, 1980: 99*).

Though these kinds of insurers are not expected to function as financial institutions at all, they need to involve into the 'saving-investment process'. It is so

because they try to be in more profitable position or earn a portion of inflow for risk financing, beside their regular profitability arriving from being a composition of larger number of exposure units of same risk class to gain surplus from financing unfortunate few from the premium contribution of the fortunate many. Further, being the institution of the money and capital market, they do not want to let their fund being idle. For these reasons, the investment will be significant for them, too.

Since this type of insurance are the risk financer for the insured against the loss on subject matter and the third party obligation, their field of operation will be quite unpredictable. The financial burden filling upon the insurer is also unpredictable. Further, this type of insurance contracts includes the major part of its liability as unearned premiums, which will be collected on advance. Such advance collection system also makes unpredictable demand of the funds.

Thus, to maintain the successful operation of the business and be prompt in claim payment, the insurer need to held major part of their inflows available to pay future losses and expenses. "Because accidents, casualties, and disasters are not all that predictable, property and liability insurance companies must have reserve of funds to cover large claims and settlements if and when they occur (*Robinson, Wrightsman and Dwayne, 1968: 87*).

"Liquidity is of much greater consequences than it is to a life insurance companies (*Dowrie and Fuller, 1950: 236*).

Since these insurers must be in the position to rise then emergency funds in case of the maturity of policy very promptly, their investment policy must be to invest on the components that can be converted without undue delay. Usually these will be the character of this kind of insurance and the investible funds:- a) major part of the funds will be in the form of unearned premium collected in advance b) a portion of the fund will be in circulation or flow in the form of premium collection and cash valances c) "In coming cash premium will usually be more than enough to pay all current expenses and losses (*Clendenin, 1955: 436*).

Regarding the investment policy of the insurers the liquidity, marketability, safety principle matters more than the maximization of the yield. Therefore, this kind of insurer's investment contains major part as the short-term money or capital market instruments and the long -term maturing components are used in least portion. The insurer can invest their permanent funds or earned funds like equities, surplus etc. in the components like corporate capital components, mortgages or real estates. These components bear the higher yield either in the form of interest or dividends or in the form of the capital gains. However, while investing on these kinds of components the proper security analyses need to be done to maintain the safety of the principle. The other portion of the funds i.e. the portion of funds including the unearned premiums, loss reserves, need to be invested in the short term maturity components like Government securities having short maturity period, commercial papers, deposits on the banks and financial institutions. These components match with the principles like liquidity, marketability, security that are the essentials of the property and liquidity insurance funds these are the components, which can be transfer into cash in no times, and are needed, so that claims occurring through the maturity of the policy contract or cancellation can be meet. Since there will not be any provision like policy loan, the insurer need not bother about the claims accruing due to the demand of the policy loan.

Regarding the property and liability and liability insurance funds, "Typical insurance policy therefore a) maintenance of a maximum invested position, employing all funds not needed in cash and receivable b) investing policy holders and creditors money only in bonds c) investing the stockholders equity in bonds, preferred stocks or common stocks.

Beside these, the political, legal, or socio-economic factors may also affect the investment policy and composition of an insurer.

2.2 Review of Related Works

I have included and discussed couples of articles written by the foreign experts in the related field (Insurance), which will further throw some more light in the understanding of the related subject vividly. All the articles that I have so selected shall put some light into different facets of the insurance sector.

The articles so selected are being discussed briefly:

A) Trends in the Indian Insurance Sector- Ishmeet Gujral.

The first article that I'm about to discuss here is "Trends in the Indian Insurance Sector" by Ishmeet Gujral. Indian economy being one of the fastest growing economies in the world is developing in a very rapid pace. In 2008, Indian economy was ranked world second fastest growing economy after China. The writer further states some facts and figures relating to the growth of the Indian economy. The sectoral distribution of the Indian economy can be figured by 62.5% in service sector, 20% in industrial sector and 17.5% in agricultural sector. India's per capita income is \$1,030, ranked 139th in the world. The sectors which are playing the major role in this fast growing and even faster developing Indian economy are the Information Technology (IT) sector; the Business Process Outsourcing (BPOs) sector; Insurance sector; Banking sector and Tourism sector.

Looking back, at the time of the British rule in India, the very first insurance company named Oriental Insurance Company was started in 1818; however, it discriminated between the British and the Indian community.

History of Insurance Company in India.

The first Indian insurance company was the Bombay Mutual Life Assurance Society which came into existence in 1870. In the early 20th century, many new insurance companies emerged and thus the Life Insurance Companies Act, 1912 made it necessary that the premium-rate tables and periodical valuations of companies should be certified by an actuary.

A monopoly existed in both Life as well as general insurance business for Life Insurance Corporation of India, (LIC) and General Insurance Corporation, (GIC) with its four subsidiaries, namely Oriental Insurance Company Limited, New India Assurance Company Limited, National Insurance Company Limited and United India Insurance Company Limited.

Liberalization, privatization and globalization resulted in a vast change and development of the Indian insurance sector, as many new private sector players entered the Insurance market which hampered the monopoly of the Government in the Insurance sector. Currently, India is the world's fifth largest life insurance market and is growing at a rapid pace of 32-34% annually.

There is a huge source of development in this sector due to a large base of untapped market because of the country's second largest population and other economic factors. According to the norms of the IRDA, many schemes are also introduced for the rural sector which focuses only on the development of this sector.

Currently, in India only two million people (0.2 % of the total population of 1 billion) are covered under Medical claims, whereas in developed nations like USA about 75 % of the total population is covered under some insurance schemes.

Privatization in India has increased due to the Foreign Direct Investments which the foreign sector companies are readily doing in order to form a merger of one foreign and one Indian Insurance company. As per the current norms of the FDI, any foreign collaboration can invest up to 26% of the total share capital and the rest 74% would be of the Indian company.

Even after the existence of 20 private sector companies in the Life Insurance business, LIC leads the chart by its top ranking. Among the private sector players, ICICI Prudential Life Insurance (Joint Venture between ICICI Bank and Prudential PLC) is the largest, followed by Bajaj Allianz Life Insurance Company Limited (Joint Venture between Bajaj Group and Allianz). Among others, Kotak Life Insurance is emerging as a one of the best product providers in the current market.

On the other hand, when we talk about the general insurance sector with the existence of 15 private sector companies, GIC leads with the 1st rank. Some major private players in this field are Royal Sundram Alliance Insurance, IFFCO Tokio General Insurance, ICICI Lombard General Insurance and Cholamandalam General Insurance.

B) Insurance Company by Indiabusiness11

As the second article that I have selected as well speaks volumes about the contributions made by the Indian Insurance Companies in the country's economy growth and development.

Insurance companies in India have made a significant contribution to the economy growth of the country and also have offered benefits to beneficiaries as well by providing various low and high investment plans. Company helps you to protect yourself from contingencies or unexpected events by providing various categories policies like for travel, health, medical and mortgage purpose. The industry in India is thriving and customers are taking advantage of the fast-paced and competitive market in easy way.

The word insurance refers to managing risk. You pay a certain amount of premium to the company against which the company provides you services like protecting your health, your car, your home or your family members. When the policy attains its maturity period or the insured person passes away, the company returns the claim amount to beneficiaries.

Insurers receive premiums from the policyholders and invest the money in risk free investments for increasing money to pay their interest. There are different types of beneficiaries such as life, health, auto and home or property beneficiaries.

An Overview

As from the eagle-eye point of view; the Indian industry has undergone a sea change over the last few years. Deregulations of the sector and massive globalization have contributed to the growth of the companies. Insurance sector in India comprises both private and government beneficiaries. Some foreign ones have also started operating in the market. FDI (Foreign Direct Investment) in the sector has grown significantly when the sector was opened by the Government of India to private carriers in 1999.

C) An Introduction to Insurance Policies- Devashree Maha.

In this article the writer has discussed about the insurance policies; the parties involved in an insurance policy and the risks and contingencies covered by an insurance policy. Insurance is a cover used for protecting oneself from the risk of a financial loss. It is important to understand that risk is a part of any person's life and that it increases as a person increases in age, responsibility and wealth. Insurance is risk coverage against financial losses and should not be taken as an investment instrument.

There are mainly two parties involved in this – the insurer and the insured. The insurer is the insurance company who will provide the cover to the insured against any financial losses. The insured may be an individual person or a group of people like an employer, members of a society, etc.

A policy is the contract between the insurer and the insured, which states the risks covered, the exclusions, if any, and the benefits reimbursed on the happening of an event like death, illness etc. The policy is paid through what is called a premium, which is a set amount that must be paid by the insured on a monthly, semi-annual or annual basis. On the happening of an event like death, disability, fire, etc, for which the insured is covered, the benefit amount stated in the policy contract can be claimed by the insured.

Classification of Insurance

There are mainly two broad classes of Insurance – Life and Non-Life.

-) Life insurance products include Term Life policies, which give pure risk coverage of only the death benefit, whereas endowment or money back policies have a risk as well as savings component i.e. death as well as maturity benefit. Also coming under the life insurance umbrella are the Unit Linked Policies in which there is a risk component and a savings component, which is invested in equity, debt or gilt funds, depending on the insurance company.
-) Non-Life insurance products include property or casualty, health insurance or house, fire, marine insurance etc. This insurance class deals with all the

non-life aspects of an insured like his/her house, health, land, office, cargo, etc which might bring financial loss.

Life Insurance Flow Process

-) The simplest life insurance business cycle looks like this:
-) The client approaches the insurer through an agent with a proposal containing his personal details, income details, medical history, products (the product describes the features provided by the insurer like maturity bonus, claims allowed etc. These features vary from product to product), sum assured (the amount for which the client is covered), term (number of years for which the client is to be covered) and premium amount (installment amount to be paid by the client to the insurer). The agent who brings this proposal is termed as a base/servicing agent for the proposal.
-) The proposal will go through various stages of approval and risk evaluation by the "Central Processing Centre" of the Insurance Company. Upon final approval, a legal agreement, termed as policy, between the insurer and the client is prepared whereby the insurer covers the client for the sum assured. The client is also entitled for some additional benefits, if any, depending on the features of the product taken in the policy. The base agent gets a commission for the policy.
-) The client pays a premium at regular intervals. These subsequent premiums are termed as renewal premiums. The base agent gets a commission on the renewal premium also.
-) The client may come back with some alterations to the policy viz. increase/decrease in sum assured, increase/decrease of the term of policy etc. The insurer will make the relevant changes to the policy and will issue endorsements stating the alterations made and their effect on the policy.

- During the term of the policy, the client can submit claims. The insurer makes payment against the claim after verification. Depending on the type of claim the policy is either terminated or is kept in force.
-) At the end of the term of the policy, the client gets the sum assured as part of the maturity benefit under life insurance policies. In addition to this the client will get the maturity bonus and any other benefits depending on the product feature.

D) General Insurance moves into the Niche- Kamesh Goyal

Kamesh Goyal, CEO, Bajaj Allianz General Insurance Company; speaks of where the sector is heading in this interview taken by Deepa Gopalan. As this interview moves forward, more light is dispersed over the future of the general insurance sector in India.

Whole of the interview can be summarized into the following important questions shown below:

Apart from medical claim and auto, what are other non-life policies?

In health insurance, apart from medical claim, there are other health plans like hospital cash, a daily allowance for hospitalization; and critical illness, the only stand-alone plan from any general insurance company to cover 10 major illnesses. There are several plans for individuals like the householders package, where they can insure their home and its contents like jewelry, electronic items like TV, VCD, DVD, etc.; shopkeepers package, where self-employed shopkeepers can insure their shop, stock, money etc.; travel package, where one can insure hospitalization expenses, loss of baggage or passport when one goes for overseas travel; office package, where proprietor firms can insure their office and office equipment.

In case of auto insurance, what is significance of a no claim bonus?

A no claim bonus is a significant incentive for the insured to encourage safe driving habits. The no claim bonus is, therefore, an incentive to the driver or the insured for having made no claims for repairs or accidents. This is one of the incentives to encourage safe driving and the ultimate beneficiary is the consumer.

How are private insurers competing with the public sector?

The market is big enough for everyone. With the entry of new players, the insurance industry has grown significantly. So the entries of new players have expanded the market and are bringing more and more people under the protection of insurance. The entry of private insurance players gave a fillip to employment.

Where is health insurance heading?

Health insurance has a big potential and has grown to Rs 1,000 crore. Health insurance has been growing at the rate of 25% each year. Unfortunately health insurance has its own problems in India, due to lack of data and standardization and uniformity in healthcare facilities, health insurance plans have not taken off as desired. Even the IT benefit under section 80-D has not been able to propel the awareness and benefits of health insurance.

The zest of this interview suggests that- Indian Insurance sector has stated looking into all those sectors, which was initially being overlooked by most of the insurance companies. The smallest part of an individual's life and belongings has now being insured against every possible day-to-day risks and contingencies.

E) Socially Responsible Investment Opportunity for Insrance Companies: Binesh Maskey (MBA)

Insurance companies have a lot of fund to invest and we simply look at the areas where we can get maximum return on investment staying with the parameters set by the regulatory body. Socially Responsible Investment (SRI) combines the social, ethical and environmental consideration of the investors with their financial objectives. In general terms ethical or socially responsible investment seeks to invest in companies, which make a positive contribution to the world, and seeks to avoid companies, which harm society or the environment. Therefore, on the surface, defining SRI might seem a no-brainer for anyone with modicum of social conscience, but this masks a number of complexities:

Different approaches to SRI

It can be difficult for an individual investor to judge whether a company is socially responsible or not. As a result, most ethical investing is done through a managed investment fund such as a unit trust or pension fund or life insurance. There are funds, which take a "negative screening" approach, merely excluding investment in specific sectors such as gambling, armaments, alcohol or tobacco. Other funds take a pro-active stance and in addition employ "positive screening", actively seeking to invest in companies involved in socially or environmentally progressive businesses. A thrid way, sometimes called "engagement" or "best sector" or " active shareholding" evolved in late 1990s. Here, rather than applying screening criteria to investment choices, the fund manager creates a dialogue with companies in their portfolio and uses his or her power as a shareholder to push for change and the adoption of ethical business practices. "Cause- based" is much narrower approach, which enables investors to support a particular cause or activity such as organic farming or regeneration of disadvantaged communities.

The subjectivity of personal values

Different people have different ideas of what is ethical and to cater for this SRI funds can differ in their objectives. For example, the classification of "human rights" as good but defence/weapons companies as "bad" is ambiguous issue. Some would argue that blindly embracing pacifism isn't the best solution for

archiving peace and point to historical examples such as the rise of the Nazis to support their point.

Screening out companies involved in alcohol, one of the traditional sin categories doesn't reflect the reality of how many people now live. And it also results in excluding some very progressive companies.

For example, companies which make beer, for decades it has regularly contributed more than 1% of its pre-tax profits to charity, been involved in community projects and has a reputation for generous wage and benefits packages. There are other contradictions: These difference in what constitutes "social responsibility" an also be seen on an international level. For example, in Canada, where resource companies make more than 40% of the Toronto Stock Exchange, ethical investors have to rethink the US screening criteria that often exclude 'messy' industries such as timber, paper products, mining and oil production. The adoption of an SRI 'best sector' approach in Canada means many of these firms have pioneered environmental programmes while offering well paid jobs in a difficult economy.

In 1991 in South Africa, black trade unions surveyed members on how to invest their \$175 pension fund, The Community Growth Fund. Rather than relying on 'ethical' categories popular in North America and the UK, such as animal testing, alcohol and tobacco, The Community Growth Fund's most important criteria were product quality, jobs, working conditions, safety, benefits and equal opportunity. The unions felt that the creation of well paying jobs is the greatest need in the South African economy and worker-related issues make up more than 75% of the screening criteria.

Why should we be interested in SRI?

If we have deeply held beliefs and values or we care about the society, the environment and the world around us, then socially responsible investment is likely to be the right option for us. There are two main reasons why we should be interested in SRI:

-) First, we may feel it's important that our financial plan should reflect our own personal values and beliefs. Socially responsible investment allows us to invest according to our principles.
-) Second, socially responsible investing means we can use our power as a shareholder to encourage companies to improve their ethical records. It is a fact of life that money makes the world go round. If companies discovered that poor or irresponsible behavior caused investors to withdraw their funds, it would make them think twice.

Where do we start?

- 1. Review our present savings and investments to find out what our money is currently supporting:
 -) Your bank and other financial service providers make use of any money in your account, investing it to earn interest while you are not using it. Question them about their codes of business ethic and social and environmental policies, and how these are applied investing your money. You can ask for information on their investment policies, and whether investments are screened for their social, ethical and environmental impact, both positive and negative. Also ask about corporate governancethe standard of business conduct that apply to the board of directors, which oversees the company's business.
 -) If you hold company shares directly, ask these same questions of the company and find out if they produce a social or environmental report.
 -) If you are a member of a pension scheme ask for a copy of the 'Statement of Investment Principles' relating to your fund. If this does not include social or environmental considerations, ask them why not.

- 2. Seek investment advice from a financial advisor who specializes in socially responsible investment. Specialist SRI Advisers offer all the services of a mainstream advisor, but can also advise you on aligning your financial plans with your values and beliefs.
- 3. Whether you have a lump sum to invest or are putting away savings regularly, considered investing on socially responsible investment fund or funds.
- 4. Consider moving your current bank account (or saving account) to a socially responsible bank. Building societies, which have not demutualised also offer current bank accounts. If you are reluctant to move your account, ask your bank for a copy of their policy.
- 5. Buy share and invest directly in companies with strong corporate social responsibility so you can encourage and support them. Alternatively, invest directly in those companies that need to change, and influence their corporate conduct through shareholder resolutions and voting with your share.
- 6. If you invest in gilt, keep in mind that there are government loans are used to finance a wide range of public spending. As well as health and education this also includes defence. If you are concerned about the arm trade, it's up to you top decide whether financing areas such as hospitals and schools outweighs this.
- 7. Think about moving your car insurance to an insurer with an ethial track record.

What are the origins of SRI?

The roots of SRI can be traced back to the 19th century and to the religious movements including the Quakers and Methodists who were concerned with the issues such as temperance and fair employment. At the beginning of 1900s the Methodist Church decided to invest in the stock market, purposely avoiding the companies involved in alcohol and gambling. During the 20th century, more

churches, charities and individuals began to take ethical considerations into account when investing.

American very much pioneered the ethical investment ideology (and still does with currently 1 in every 8 US dollars invested in SRI) and in 1971 the Pax Fund was set up which excluded companies associated with the Vietnam war. The ethical fund in the UK was launched in 1984 by Friends Provident. The ranks of socially concerned investors grew dramatically through the 1980s as millions of people focused investment strategies on pressuring the South African government to dismantle its apartheid regime. Then the Bhopal, Chernobyl and Exxon Valdez incidents and new information about climate change made the environment a key concern for many SRI investors. More recently issues of human rights, fair trade and third world exploitation have also become rally points for ethical investors.

What is cause-based investment or social investment?

Socially responsible investment isn't confined to shares traded on the world's stock exchanges. Many investors prefer to back particular projects or causes. This type of direct investment is sometimes described as 'cause- based', 'alternative', 'social' or 'mission- based'. Investors should be aware that many cause based investments specifically offer a below market financial return in order to allow the delivery of a high social return, bringing benefits to the causes they support. This type of invest takes many forms but typically helps encourage regeneration by providing cheaper loans to enterprises in under-invested communities, assists organic farmers during their conversion period, invests in the regeneration of tropical hardwoods or helps producers in the developing world to export their goods to fair trade markets.

How do we buy shares directly in socially responsible companies?

An SRI financial advisor should be able to advise you on buying shares in ethical, socially responsible, or environmentally friendly companies. Some ethical

investors also buy shares in companies they wish to change and then use their rights as shareholders to put pressure on companies to improve their policies and practices. However, unless you are familiar with buying individual shares, this can be time consuming and expensive. In this case it may be better to ask your financial advisor to recommend a socially responsible fund where the manager can do the research, stock selection and management for you.

Finding out which company have ethical or socially responsible policies- Many company have strict disclosure policies, which means the information about their business practices is freely available to the public. You can access this on websites or company literature. Unfortunately, not all companies do this and without the access to this information it's difficult to make an informed choice about investing in the company.

F) GOLF Threats on Hydrel Projects- Dr. J. Ghosh (Phd)

Its hardly news that the world's glaciers are melting—a phonomenon widely attributed to gradually rising global temperatures. But the possible consequences in terms of human deaths and loss of property have reached greater urgency in light of the findings of the new study. Sites studies of lakes and lake lets have become more crucial since the U.N. Environment Programme (UNEP) sounded the alram the nearly 50 lakes in the Himalayan are at high risk of brusting their banks. UNEP warned in April 2002 that 20 glacial lakes in Nepal and 24 in Bhutan may brust their banks within five to the years unless urgent action is taken.

There are currently 3,252 glaciers and 2,323 glacial lakes in Nepalese Himalaya. It is not just people downstream who are at risk. UNEP said, but many millions of dollors of property tourism facilities, trekking trails, roads, bridges and hydropower plants that are the economic lifeblood of many countries in the region. As a rising temperatures accelerates glacier melting—raising the levels of glacier lakes—many rivers and freshwater systems could run dry.

What is Glacial Lake Outbrust Flooding (GLOF)

One of the most tangible manifestation of climate chainge is the fact that may glaciers are melting.

The Third Assessment Repot of the Intergovernment Panel on Climat Change (IPCC) states that there is a high measure of confidence that in the coming decades many glacier will retreat and smaller glaicers may disappear altogether. This has already been seen in the Alps, where a I drgree C increase in temperature has caused glaciers to shrink 40% in mass and 50% in volume since 1850 (IPCC, 2001). Analysis of local and regional records of glaciers fluctuation in the Hindu-Kush-Himalayan (HKH) region during the same period shows that, wile examples exist of both advance and retreat, the glacier have mostly been retreating (Chalise, 1992).

Glacial lake outbrust floods (GLOFs) were first obesrved in Iceland and identified under the name *jokulhlaup*, Icelandic for "glacire leap". Ives (1986:2) observes: "The catastrophic discharge of large volumes of water is characteristic of many mountain regions, and especially glaciated areas. Such discharges usually results from the collapse of unstable natural dams formed when stream channels are blocked by rock fall, landslide, debries flow, or ice and snow avalanches. Another cause is the outbrust of lakes dammed by glacier ice or by glacier moraines. Depending upon the availability of loose materail, the outbrusts may be flood surges with a high sediment load, or actual debries flow". Richardson and Raynolds (200:31) further describes the phenomenon in the Himalays: "As glaciers recede in response to climate warning, the number and volume of potentially hazardous moraine- dammed lakes in the Himalays is increacing. The lakes develop behind unstable ice-cored moraines, and have the potential to brust carastrophically, producing devastating Glacial Lake Outbrust Flood (GLOFs).

The Namche Hydel Tragedy- 1985

The most signifiacnt GLOF event in terms of recorded damage occurred in 1985 in Nepal. This GLOF caused a 10 to 15 meter high surge of water and debris to flood down the Bhote Koshi and Dhud Koshi Rivers for 90 kilometer. At its peak, 2000 m3/sec discharged, two to four times the magnitude oof maximum monsoon flood levels. It destroyed the Namche Small Hydel Project, which was almost completed at the time and cost approximately NRP 45 million. The Namche Hydel site sustained such damage that it was deemed unlikely to be salvageable for any reconstruction of the plant. Severe erosion destroyed the weir and headrace canal where water would flow into the plant. The flood plain was extensively widened. This damage was nott only the damage that occurred that day on 4th August 1985. Damaged occurred all along the length of the Langmoche Khola- Bhote Koshi-Dhud Koshi for a total of 90km (Ives 1986), including: 14 bridges, including new suspension bridges were distroyed; at least 30 houses, likely the only property the family had; erosion, undercutting, and destabilization of long stretches of the main trail form the airstrip at Lukla to Mount Everest base camp.

An earlier GLOF in 1977 was recorded at Dhud Koshi. This event killed two or three people, destroyed bridges for 35km downstream, and triggered many debirs flows. Construction material for a hotel that were kept 10m above the river were swept away.

With regard to a lake outburst, there are many trigger mechanism, including earthquakes, spontaneous breakage of the moraine dam, and events such as the collapse of a large "hanging glacier" into the lake. However, climate change and higher temperatures are contributibing to a very rapid increase in the volume of glacial lakhs, which significantly increase the probability of catastrophic failure of lake walls as a result of these triggers. Richardson and Reynolds (2000) report that ice avalanches triggered more than half of all the recorded GLOFs in the Himalayas. Furthermost, all of the events occurred between the monsoon months of June and October when the lakes levels were at their highest. Therefore, increased intensity of monsoon precipitation which has been observed in recent years (and is consistent with climate change projection) could be an additional climate induced risk, in addition to rising temperature that result in higher lake levels. Empricial evidence on the frequency of GLOFs outbreaks seems to support this. Richardson and Reynolds (2000:36) note: "Historical records compiled by the authors of 33 Himalayan GLOFs indicate that the frequency of events appears to be increasing. It is also known that many existing lakes are growing in sizw as glaciers retreat and their morain dams degrads. The potential for large and more frequent floods in undoubtedly increasing

The Impact of GLOFs in Hydropower Projects:

The impact of the future GLOFs on hydropower will be proportional to the amount of water in the lakes, slope of its path downstream, debris and sediment picked up, and proximity of hydropower plant.

In the Himalayan, riverbanks are very steep and highly variable over short distances. It is likely that a GLOF would cause both vertical and lateral erosion. This would sparrk off further debris flows and landslides. The of the Namche hydropower plant in 1985 did indeed serve as a catalyst for the government and donors to begin to pay attention to GLOF risks in sitting and construction decision for hydropower facailities. For example, in developing Arun- III project funded by the World Bank, the threat of GLOF was brought to the attention of donors during the later stages of the decision making.

Lessons from Namche Episode:

Documents from the Namche project that was destroyed in the 1985 GLOF event do not give evidence that any "special attention was paid to the possible occurrence of catastrophic geomorphic events, despite the fact that the project was being sited in one of the highest and most precipitous mountain regions in the world" (Ives, 1986:18). However, after the Namche disaster in 1985, the Austrain Government relocated the plant and built it in another location. It has since been under continuous operation and the risk of GLOF is estimated low. However, in relocating hydropower plants, there is the question of whether the generating capacity is lowered, or if transmission costs increase. With the potentially reduced generating capacity, is it still possible to promote industrial and commercial growth at a rapid enough pace? Another concern is that, given the general uncertainty of GLOF risks at this time, investors and energy planners may be reluctant to relocate plants when it is only one of many factors in choosing a site.

Catchment-wide analyses should be undertaken to determine the vulnerability downstream of hazardous glacial lakes. Furthermore, secondary damming resulting from the initial GLOF can pose just as great a risk to hydropower plants by formatting large reservoirs, which may then brust themselves. In fact, the risk may be even greater, since the reservoirs are much closer to the another plant. An integrated risk management approach is therefore needed to supplement satellite based risk mapping of the lakes themselves.

Viability of Smaller Hydropower Plants:

Hydropower in Nepal is divided into four categories: Micro: upto 100 kW; Small: 101 kW to 10 MW Medium: 10 MW to 35 MW; Large: greater than 35 MW

One adaption response to GLOF risks is to promote the development of smaller plants would also spread the risk of a catastrophic flooding event and avoid damage to huge plant with significant sunk costs. Micro- hydropower has the potential to fulfill a large amount of the rural demand for energy. Water wheels (ghatta) have already been used in Nepal for hundreds of years to process agricultural products. Nepal has 6,000 rivers and rivulets, with 25,000 traditional ghatts in use. Current micor-hydropower plants range from 1 to 56 kW, and there are currently 924 units in the country, totaling approximately 10 MW. In additional, there is now a move to privatize hydropower plants with less than 10 MW capacity. For small and medium plants, the Ministry of Finance announced in the budget speech of 2001/02 that HMG will promote private investment in them as a "priority sector." This would encourage private development and increase the skills base of entrepreneurs and workers.

One issue is whether small hydropower of smaller scale plants would be sufficient to fuel industrial growth in Nepal. Further investigation is needed to determine this. On the other hand, one of Nepal uppermost priorities is rural development, and small and micro-hydropower will play a much more important role in the regard. The small hydropower plant is under the control of the district, and can be managed more efficiently. Local expertise and technology is more readily available than for larhe projects, which often call for foreign assistance. Also, it is not necessary to build dams or storage reservoirs for small plants, so there is less risk of environmental damage.

With regard to whether micro and small hydro facilities will suffice to meet Nepal electricity demand, the current situation is that Nepal cannot currently absorb the electricity generated by mega plants.

However, it is important to note that Nepal is currently at only about 15% electrification, and significant increase in its electricity demands are likely in coming decades as industries develop and as a significant portion of its population moves from biomass to electricity. It is not clear whether such future demands could be adequately met by small and micro hydropower alone.

Finally, while small and micro hydro offers a suitable diversification to GLOF risks, they might be a good safeguard against variable and low flow situations that are anticipated under certain climate change scenarios.

Reduction in GLOF Risks:

A set of adaptation responses to GLOF hazards revolves around the physical reduction in the flooding risks of glacial lakes. Rana *et al.* (2000) list several solution, including: A. During the lake by siphon or pump B. Cutting a drainage channel for the lake to periodically drain C. Flood control measures downstream to mitigate the effects of the flood D. Developing a GLOF early warning system.

An added benefit of GLOF mitigating measures is that the "methods of remediation can be harnessed to facilitate safe management of water resources for hydro-electricity power at a local scale (micro- hydro power) and for export (major hydro- electric power generation facilities)." (Reynolds and Richardson, 1999: 215).

In addition to hydropower, the siphoned water could also be used to supplement dry season flow, maintain adequate water levels in downstream ecosystems to protect valuable fish stocks, supply water for local usage and even provide recreational facilities.

GLOF mitigation measures however each have their own disadvantages. Pumping is expensive; because of remote location at high altitudes, heavy infrastructure must be flown by helicopter to the site. Flood control measures less desirable because Nepal's topography with steep gardient makes the flood behave unpredictable as it moves downstream, the flood can carry on for 200km. futher, in effect, it is does not prevent a GLOF from happening in the first place. GLOF early warning systems tend to be expensive to set up and maintain, and only benefit populations downstream enough to have sufficient lead time. These disadvantages notwithstanding, there is one instance in Nepal where such responses have in fact already been implemented in an integrated manner. The Tsho Rolpa glacial lake is one of the most significant examples of collaborative anticipatory planning by the government, donors and experts in GLOF mitigation. Theorem Rolpa wa estimated to store approximately 90-100 million m3, a hazard that called for urgent attention. A 150 meter tall moriane dam held the lake, which breached could cause a GLOF event in which a thrid or more of the lake could flood downstream. The likelihood of a GLOF occurring at Tsho Rolpa, and the risks it posed to the 60 MW Khimto hydropower plant that was under construction downstream, was sufficient to spur HMG to initiate a project in 1989, with the support of the Netherlands Development angency (NEDA), to drain down the Tsho Rolpa glacial lake. This effort was led by the department of Hydrology and Meteorology (DHM), with the technical assistance of Reynolds Geo- Science Co. Ltd. Of Britain, supported by the UK Department for International Development (DIFD). To mitigate this risk, an expert group recommended lowering the lake there meters by cutting an open channel in the moriane. In addition, a gate was constructed to allow water to be released as necessary. While the lake draining was in progress, an early warning system was simultaneously established in 19 villages downstream of the Rolwaling Khola on the Bhote/ Tama Koshi River to give warning in the event of a Tsho Rolpa GLOF. Local villages have been actively involved in the design of this system, and drills are carried out periodically. The World Bank provided a loan to construct the system. The fouryear Tsho Rolpa project finished in December 2002, with a total cost USD 231,000 provided by HMG.

The gobal of lowering the lake level was achieved by June 2002, which reduced the risk of a GLOF by 20%. The complete prevention of a GLOF at Tsho Rolpa necessitates further the lake water, perhaps by as much as 17 meters. Expert groups are now undertaking further studies, but it is obvious that the cost of mitigating GLOF risks is substantial and time consuming. The cost, however, is much less than the potential damage that would be caused by an actual event in terms of lost lives, communities, development setbacks, and energy generation. Above all, the rage of GLOF depends as much as we seriously take the issue of global warming globally as well as locally.

2.2.1 Review of Previous Research Work

Various experts, authorities and MBA students have conducted a numbers research relating the insurance business. Among them only few are related with the investment aspect of the insurer and insurer business. Among them least are related to the premium collection and investment.

Pathak (2002) has conducted a research in a topic *Evaluation of Financial Performance of Nepal Insurance Company and Himalayan General Insurance Co. Ltd.* 28 the primary objective of the study is too analyzed and to evaluate the financial performance of HGIC and NIC.

His Main Objectives:

-) To review the existing situation of sample insurance companies.
-) To analyze financial performance of both insurance companies.
-) To provided recommendation on the basis of findings.

His Major Findings:

- HGIC and NIC have not been following better policy to keep sound liquidity position.
- Creditors of both companies are in safe side investment in total assets through net worth of-HGIC is higher than NIC. The degree of financial risk of NIC is higher than HGIC.
- HGIC has mobilized its assets effectively than NIC.

Thapa (2003) has conducted a research in a topic, *Insurance Industry in Nepal; A Comparative Study on Premium Collection and Investment Pattern* uses both primary and secondary sources of data. The period covered was for 2053/64 to 2057/58. The basic objective of this thesis is to examine how far the different insurance premium are collected and invested them properly.

His Main Objective:

-) To compare the various companies premium collection and investment pattern.
-) To examined the trend and pattern of investment and premium collection.
-) To analyze the management opinion instance to premium collection and investment
-) To analyze the current situation of the Nepalese insurance business.

His Major Finding:

-) The premium collection rate of Nepalese insurance industry has been fluctuating trend.
-) The insurance industry has not consisted in the investment proportion and various investment sector and investment portfolio too.
- Among the insurance policy, the ratio of premium collection is higher in fire insurance and lower in engineering policy.
-) The co-efficient of correlation between premium and investment of Nepalese insurance industry has high degree of positive correlation with signification relationship.

Dahal, Narayan P. (2009) has conducted a research in a topic *Profit Planning in Sagarmatha Insurance Company*. This study is concerned in the application and effectiveness of profit planning system in manufacturing establishment with special reference to Sagarmatha Insurance Company. The time period covered by this research was ten years from FY 2058 to 2067.

His Main Objectives:

-) To interpret the trend of profit and loss account sagarmatha insurances company.
-) To analyze the production plan and actual production trend of the sagarmatha insurances company.
-) To give a suggestions and recommendations for the betterment of company.

His Major Findings:

- Lack of budgeting expertise, skilled planners and entrepreneurship.
-) Great communication and co-ordination gap between different levels of management and workers.
-) No any effective programs to achieve desired goals and objectives and to overcome the existing problems and challenges.
-) No any systematic and effective financial plan.
-) No any proper practice of segregation cost into fixed, variable and semi variable and it has any proper records of different cost.

Sagar Mishra (2010) has conducted a research in a topic *Profit Planning in Tokla Tea Estate (TTE);* The basic objectives of this research paper are to examine how far the different functional budgets are being applied as a tool of profit planning in the estate.

His Main Objectives:

-) To interpret the trend of profit/loss and cost of the company in the light of profit plan.
-) To identify the sales plan for the company in the high of strategic and tactical sales plan.

-) To analyze the production plan and actual production trend of the company.
-) To review the Tokla tea estate's profit planning on the basis of overall managerial budgeting.

His Major Findings:

-) Inadequate evaluation of relevant internal and external variables.
-) Problems of maintaining the quality of the products.
-) Inadequate profit and productively due to lack of skilled manpower, excessive fixed cost and inventory.
-) Unrealistic sales for casts etc.

Khulel (2010) has conducted a research on Sales Budget Practice in Insurance Company in Everest Insurance Company,

His Main Objectives:

-) To analyze the effectiveness of profit planning in EIC.
-) To study the variance in budgeted and actual sales
-) To suggest appropriate recommendations

His Major Findings:

-) There is no significant classification of overhead expenses
-) There is no practice of PPC except sales budget
-) The company has never failed to achieve its target
-) EIC has no clear cut vision of PPC

Sharma (2011) has conducted a research in a topic *Revenue Planning & Management of Manufacturing Public Enterprises: (A case study of Singh Durbar Vaidya Khana Vikas Samiti);*

His Main Objectives:

-) To analysis the actual sales and budgeted sales.
-) To examine revenue generate by SDVKVS.
-) To recommendation and suggestion for RDL.

His Major Findings:

-) SDVKVS has adopted only product/categorized budget. But it has not adopted practice of preparing monthly budget.
- J There is no surprise sale.
-) There are no actual bad debts shown in an account.
- J In the calculation of profit volume ratio, it has shown that its fixed cost is high.
-) The pricing policy needs revision and adjustment of pricing policy organization is not fare.

2.3 Research Gap

There is close relationship between Thapa's study and this study because both studies are about premium and investment. Both studies use five years data to analyze premium and investment. There are gaps between these studies also. Thapa emphasis the investment patterns but this study emphasis on premium collection and investment position. Thapa uses all non-life companies but this study is based on only one non-life insurance company (Thapa, 2003).

Gelal's study and this study both dealt with NIC (General Insurance Company) and NLGI (Under writes both life and general insurance business) but Gelal analyzed financial performance and this study analyzed premium collection and investment position.

Gelal emphasis financial tools (ratios) and ignore statistical tool like 'T' test. Since this study and Gelal's study is related to different type of two insurance companies some difficulties will arise in analysis of data. Gelal's study was comparative but study is not comparative (Ghale, 1998).

The relationship between Pathak (2002) and this thesis are only on conceptual sector because; both studies are on insurance business. Pathak focuses on financial performance and he includes in his study premium collection and investment position also. As a whole, both of the thesis are related because, premium collection is the major tasks of all insurance companies and investment properly is the second major task. Although Pathak submitted this thesis on 2002 but he uses data from the date of 1994/095. It shows that Pathak did not give time to prepare the thesis. He focused his study on financial performance.

CHAPTER - III RESEARCH METHODOLOGY

3.1 Introduction

For any type of study, a sound research methodology is necessary. 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 of data. It is careful search or inquiry into any subject matter, which is a endeavor to discover of find out valuable facts which would be useful for further application or utilization.

This study aims at presenting, evaluation and finding about the investment position, premium collection condition and investment return of PICL. The study will raw an actual scenario of investment position and premium collection condition of PICL. To accomplish this goal, the study follows the research methodology described in this chapter as such.

Research Methodology refers to the conceptual structure with in which the research is being conducted. It is a way to solve the research problem systematically. It facility the research work and brings reliabilities the research work and validity on it. It discusses the procedure employed on study including data collection and analysis. A research work should follow the scientific methods while collecting the data and analyzing them.

This study is based on primary and secondary data. Information will be gathered from interview with Managers and Officers of the company the various published annual reports, Newspapers, Reports of Insurance Board and other published and unpublished documents related to this study.

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3.2 Research Design

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. It is the plan and formulation of investigation idea and strategy so as to obtain answers to research questions and to control variance.

Research design is the main part of any research work. It is the preplan of any research or thesis work. "A research design is the management of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure" (*Claire Selltiz and Abbociates, 1962*).

To achieve the objective of this study descriptive and analytical research designs have been used. The research is so designed that the analysis and interpretation of the secondary data relates to the evaluation of past behavior of the insurer relating to the premium collection and investment position of PICL.

3.3 Populations and Sample

The large group about which the generalization is made is called the population under study, or the universe, and small portion on which the study is made is called the sample of the study (*Shrestha and Silwa*, 2064: 78).

In this study, the total population is the financial statements published by the company (PICL) from the beginning till the period of study. And the financial statements taken to analyze about the company are the sample of the study. So the entire operating period of the company from establishment till now (this date) is the population of the study and the period covered by this study (this thesis) is the sample period of the study.

In Nepal, there are 25 insurance companies functioning to underwrite insurance business. But this study undergoes to research the premium collection and investment position of Prudential Insurance Company Limited among 25 insurance companies. Prudential Insurance Company is one of leading insurance company of Nepal.

3.4 Source of Data and Data Collection Procedure

This study is based on both primary and secondary sources of data. Statistics and other information and relevant data have been collected form the following sources as:

-) Books relation the subject.
-) Thesis and reports conducted by various Ph. D, MBA and MBS students relating insurance field.
- Publications of Nepal Stock Exchange & its web site: <u>www.nepalstock.com</u>.
-) Publications of Insurance Board of Nepal.
- Published or unpublished financial statements of the other insurer.
-) Various Publications of the Government agencies and Bodies relation to the field.
- Various Brochure, Journals as well as Booklets Published by the insurers.

Only the secondary data are not enough for the study. Besides these, however, primary data are also important for the study. So, primary dada are also derived to some extent through observations, cross-questions, frequent visit and discussion with the personnel of the concerned company.

3.5 Analysis of Data

The data collected from PICL, Beema Samiti and other authorities have been reorganized and refined in the form of taxes, charts and then necessary statement, ratios, trend analysis, percentage indices etc. have been established in necessary.

3.6 Tools of Analysis

Data collected for the purpose to show premium collection and investment positions are analyzed through the use of two important tools. The first important tool is financial tool and second important tool is statistical tool. The following paragraphs are briefly discussed in this study.

3.6.1 Financial Analysis Tools

Generally, the financial analysis tools were used for the purpose of the assessment of the financial position to a particular organization. There were various tools in financial sector but for the purpose of this study Ratio analysis was performed in the study. Certainly ratio analysis showed the position of premium collection, investment, return and their contribution on overall performance.

3.6.1.1 Ratio Analysis

The term ratio refers as arithmetical relationship between two figures, in order to take rational decisions of financial variability of the company, the ratio analysis is adopted. Ratio can be expressed as percentage, fraction and stated comparison between numbers. It is an indicator yardstick or measuring rod or evaluating the financial performance and position of firm. In order to analyze premium collection and investment position of PICL, the following ratios are used.

Ratios use for PICL:

Fire Premium Collection to Total Premium Collection

 $X \frac{\text{Fire Premium Collection}}{\text{Total Premiium Collection}}$

Marine Premium Collection to Total Premium Collection

 $X \frac{\text{Marine Premium Collection}}{\text{Total Premiium Collection}}$

Miscellaneous Premium Collection to Total Premium Collection

X Miscellaneous Premium Collection Total Premiium Collection

Investment to Total Premium Collection

 $= X \frac{Investment}{Total Premiium Investment}$

Return on Investment

X Net Income Total Investment

Interest Earned to Total Premium collection

X Interest Total Premiium Investment

Claims Paid to Total Premium Collection

 $X \frac{\text{Claims Paid}}{\text{Total Premiium Collection}}$

Investment on Govt. Saving Bonds to Total General Investment

X Investment on Govt. Saving Bond Total General Investment

Interest earned to Total Investment Ratio

X Total Interest Earned Total Investment

Return on Premium

 $X \frac{\text{Return}}{\text{Premium}}$

3.6.2 Statistical Analysis Tools

Statistical tools were used for attaining accuracy on analysis and study. We can use different statistical tools to analyze and type of study. According to this study's objective here, mean, standard deviation, coefficient of correlation and Trend analysis were performed.

3.6.3. The Mean

Simple arithmetic mean is the sum of total valued to the number of values in the sample, thus

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

Mean ($\overline{\mathbf{X}}$) X $\frac{x}{N}$

3.6.3.1 Coefficient of Correlation

Coefficient of correlation is used for measuring the magnitude of linear relationship between two variables. In this study to attain the relationship between 'premium collection and Investment', 'Premium collection and claim paid' and 'Investment and Net income earns, co-efficient of correlation is used.

The value of coefficient of correlation lies between +1 and -1, when co-efficient of correlation (r) = +1, it means there is perfect positive correlation between the variables, r = -1, it means there is perfectly negative correlation between the variables and r = 0 refers there is no relationship between variables. Among the various methods of finding out co-efficient of correlation, Karl person's method is applied in this study.

Co-efficient of correlation (r) $X \frac{xy}{\sqrt{x^2}\sqrt{y^2}}$

Whereas, x = X - ss

$$y = Y$$
-

Probable error of correlated by the following formula.

$$\text{PE}(\mathbf{r}) = 0.6745 \mid \frac{1 \, \text{Z} \, r^2}{\sqrt{n}}$$

3.6.3.2 Trend Analysis

In order to draw the varied conclusion of investment and premium aspect some statistical tools are used. As a statistical tool trend analysis was used here to show the basic tendency of investment and premium components.

3.6.3.3 Standard Deviation

Standard deviation is commonly used to measure of risk. It shows the deviation of actual mean with average mean. Standard deviation measures the absolute dispersion or variability of a distribution. The greater variability or dispersion, greater the standard deviation for the greater will be the magnitude of the deviation of the value from variability, smaller the standard deviation for the high degree of uniformity of the observation as well as homogeneity of series. Hence, standard deviation is extremely useful in judging the representative of the mean.

Standard deviation () =
$$\frac{\sqrt{(x Z_x^z)^2}}{n}$$

3.6.3.4 Co-efficient of Variation (C. V.)

The corresponding relative measure of dispersion is known as the co-efficient of variation. It is used in such problems where the study needs to compare the variability of two or more then the series the higher co-efficient of variation of series refers more variable or less consistency or loss uniformity and vice versa. It is calculated as follows

Co- efficient of Variation (C.V.) =
$$\frac{1}{x}$$

Where,

$$\overline{\mathbf{X}}$$
 = Mean
= Standard deviation

In this study, the coefficient of variation is calculating the measure the variability on net premium of various insurance.

CHAPTER - IV DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The objectives of the study have been already highlighted in the first chapter. In order to accomplish the above objectives, descriptive and analytical research design has been followed, which are mentioned in the third chapter. The main objective of this study is to evaluate the premium collection and investment position of PICL. As mentioned earlier, various financial and statistical tools have been used, in order to accomplish the targeted objectives.

For the purpose of study and analysis, secondary and primary data are used. Based upon the data analysis and study major findings are concluded. This data presentation and analysis chapter is separated into two parts; they are- "evaluation of premium collection and composition through financial tools" and the other is-"evaluation of investment pattern and composition through financial tools and statistical analysis".

4.1.1 Evaluation of Premium Collection and Composition through Financial Tools

Collected premium is the main source of an insurer for the purpose of investment. It shows the performance of the insurance company. Higher premium tends the higher volume of transaction. All the insurers try to collect higher premium because they succeed to receive higher income from the investment.

All the theoretical concept of premium is mentioned in the above chapter, which may be enough for the theoretical idea. Therefore, here, only quantitative analysis is described, which is related to the premium collection and its composition. For the purpose of the evaluation of the premium collection condition and composition among the portfolios, mean, standard deviation and coefficient of variance are used. For the comparison of all the respective matter in premium collection, various ratio analyses are computed. This evaluation chapter is also separated into two parts as "financial analysis" and "statistical analysis" likewise evaluation of investment patterns chapter.

4.1.1.1 Fire Premium to Total Premium Collection and Fire Claim Paid to Total Claim Paid

This ratio used to measure the collection of fire premium collection in total premium collection and fire claim paid to total claim paid. It reveals the weight of fire premium collection and fire claim over the total premium collection and total claims paid respectively of PICL. It measure using following equation:

Fire Premium to Total Premium Collection $X \frac{\text{Fire Premium Collection}}{\text{Total Premium Collection}}$ And,

1110,

Fire Claim Paid to Total Claim Paid $X \frac{\text{Fire Claim Paid}}{\text{Total Claim Paid}}$

Table: 4.1

Fire Premium to Total Premium Collection and Fire Claim Paid to Total Claim

Fiscal	Fire	Total	Fire	Total	Fire Premium to	Fire Claim
Year	Premium	Premium	Claim	Claim	Total Premium	paid to Total
	Collection	Collection	Paid	Paid	Collection (%)	Claim Paid
						(%)
2062/063	22,012,807	88,642,822	111,323	6,245,769	24.83	1.78
2063/064	23,085,454	98,875,747	(141,774)	10,784,138	23.35	-1.31
2064/065	29,247,382	108,149,475	555,076	10,900,731	27.04	5.09
2065/066	41,777,550	137,284,073	1,279,359	15,400,699	30.43	8.30
2066/067	51,056,318	183,367,850	1,373,806	23,806,398	27.84	5.77
Mean					26.69	3.92
S.D					2.45	3.34
CV					9.18	85.2

Paid

Sources: PICL Annual Reports

Figure: 4.1

Fire Premium to Total Premium Collection and Fire Claim Paid to Total Claim



Fire insurance premium hold one of a major portion of the total premium in the company. Above table shows the average of fire premium to total premium collection of the insurer. According to the table highest contribution of PICL is 30.43% in the year 2065/066 and lowest is 23.35 % in the year 2063/064. The trend of collection of fire premium decreased by 1.48% from the year 2062/063 to 2063/064; again from the fiscal year 2063/064 to 2064/065, growth of 3.69% could be seen. Similarly, from the fiscal year 2064/065 to the fiscal year 2065/66, growth of 3.39% has been analyzed. But a slight decreased of 2.59% could be seen from the fiscal year 2065/066 to the fiscal year 2066/067. The average fire premium collection to total Premium collection in this 5 years period is 26.69%.

The claim paid to fire insurance has decreasing trend till the fiscal year 2063/064. The highest portion of fire claims to total claims is 8.30% in the fiscal year 2065/066 and lowest is (1.31%) in the year 063/64. It showed negative amount in the year 063/64 because of large outstanding amount in the previous fiscal year. Again, we can analyze the decrease in the claims paid by 2.53% during 2066/067 fiscal year. By this figure, we can say that the fire insurance is a most profitable and less risky business of this company.

4.1.1.2 Marine Premium Collection to Total Premium Collection and Marine Claim Paid to Total Claim Paid

This ratio is used to measure the contribution of marine premium collection to total premium collection and marine claim paid to total claim paid of the company. The following equation is used to measure it:

Marine Premium Collection to Total Collection

 $X \frac{\text{Marine Premium Collection}}{\overline{\overline{x}} + \overline{x} + \overline{x} + \overline{x}}$

Total Premium Collection

And,

Marine Claim Paid to Total Claim Paid $X \frac{\text{Marine Claim Paid}}{\text{Total Claim Paid}}$

Table: 4.2

Marine Premium Collection to Total Premium Collection and Marine Claim Paid to Total Claim Paid

Fiscal	Marine	Total	Marine	Total	Marine	Marine Claim
Year	Premium	Premium	Claim	Claim	Premium to	paid to Total
	Collection	Collection	Paid	Paid	Total Premium	Claim Paid
					Collection (%)	(%)
2062/063	35,431,614	88,642,822	133,157	6,245,769	39.97	2.13
2063/064	39,265,921	98,875,747	1,702,803	10,784,138	39.71	15.79
2064/065	33,636,756	108,149,475	892,199	10,900,731	31.10	8.18
2065/066	33,524,967	137,284,073	1,292,421	15,400,699	24.42	8.39
2066/067	26,683,932	183,367,850	633,732	23,806,398	14.55	2.66
Mean					29.95	7.43
S.D					9.64	4.94
CV					32.19	66.48

Figure: 4.2





One of a major portion of premium collection in this company is Marine insurance premium along with the fire premium collection as we have already discussed above. The highest premium collection of Marine insurance premium of PICL is 39.97 % in the year 062/63 and lowest contribution is in the fiscal year 2066/067, which is 14.55%. The Marine insurance premium collection shows a declining trend since the fiscal year 2062/063 to the fiscal year 2066/067. The major decrease can be seen from the fiscal year 2065/066 to the fiscal year 2066/067, which is 9.87%. The average marine premium collection to total premium collection in this 5 years period is 29.95%.

The claim paid of marine insurance to total claim paid has shown some fluctuating trends. The highest portion of the marine claim paid is in the fiscal year of 2063/064 which is 15.79%; and lowest portion is 2.13% in the year 062/63. But the study shows declining trend in the marine claim paid since the fiscal year 2063/064(15.79%) to the fiscal year 2066/067(2.66%). The table shows that the

average claims paid to total claim is 7.43%. It shows that the marine insurance is riskier than fire insurance.

4.1.1.3 Motor Premium Collection to Total Premium Collection and Motor Claim Paid to Total Claim Paid

This ratio is used to measure the contribution of motor premium collection towards total premium collection and Motor claim paid to total claim paid of the company. It shows the percentage of share hold by motor premium collection in total collection and motor claim paid portion to total claim paid. The following equation is used to measure it:

Motor Premium Collection to Total Collection = $X \frac{\text{Motor Premium Collection}}{\text{Total Premium Collection}}$

And,

Motor Claim Paid to Total Claim Paid $X \frac{Motor Claim Paid}{Total Claim Paid}$

Table: 4.3

Motor Premium Collection to Total Premium Collection and Motor Claim Paid to Total Claim Paid

Fiscal Year	Motor Premium	Total Premium	Motor	Total Claim	Motor Premium	Motor Claim
	Collection	Collection	Claim Paid	Paid	Collection to Total	Paid to Total
					Premium Collection	Claim Paid
					(%)	(%)
2062/063	18,975,750	88,642,822	4,715,493	6,245,769	21.41	75.50
2063/064	22,369,467	98,875,747	8,176,874	10,784,138	22.62	75.82
2064/065	23,655,983	108,149,475	6,071,268	10,900,731	21.87	55.70
2065/066	38,484,786	137,284,073	7,308,179	15,400,699	28.03	47.45
2066/067	78,104,297	183,367,850	20,352,329	23,806,398	42.59	85.49
Mean					27.30	67.99
S.D					8.004	14.03
CV					29.32	20.64

Figure: 4.3

Motor Premium Collection to Total Premium Collection and Motor Claim



Paid to Total Claim Paid

The contribution of Motor premium collection displays a very uneven trend. We can see a growth of mere 1.21% from the fiscal year 2062/063 to 2063/064, which decreases in the following fiscal year by 0.75%. In the fiscal year 2065/066 the company has a commendable growth in the premium collection, which grew by 6.16% than the following fiscal year to 28.03%. The company further experienced a hefty growth in the fiscal year 2066/067, which recorded 42.59% premium collection; growth of 14.56% than the past fiscal year. The average motor premium collection for the past five fiscal years is 27.30%.

The Motor claim paid table displays as uneven trend as the premium collection table of the same. We can witness a pinch of growth (0.32%) in the claim paid from the fiscal year 2062/063 to the fiscal year 2063/64. But a huge decrease of 20.12% in the claim paid could be seen in the fiscal year 2064/065, which came down to 55.70%. Further decrease has been recorded in the following fiscal year 2065/066; which is 47.45%. But a very stiff growth in the motor claim paid has been recorded in the following fiscal year of 2066/067, which grew from 47.45%

from the past fiscal year to 85.49%. The average motor claim paid for the past five fiscal years is 67.99%.

4.1.1.4 Engineering Premium to Total Premium Collection and Engineering Claim Paid to Total Claim Paid

It is the ratio used to measure the collection of engineering premium collection in total premium collection and Engineering Claim Paid to Total Claim Paid. It reveals the weight of engineering premium collection over the total premium collection weight of Engineering Claim Paid to Total Claim Paid of PICL. It measure using following equation:

Engineering Premium to Total Premium Collection

X Engineering Premium Collection Total Premium Collection

And,

Engineering Claim Paid to Total Claim Paid

Table: 4.4

Engineering Premium to Total Premium Collection and Engineering Claim Paid to Total Claim Paid

Fiscal	Engineering	Total	Eng.	Total	Engineering	Eng. Claim
Year	Premium	Premium	Claim	Claim	Premium Collection	Paid to
	Collection	Collection	Paid	Paid	to Total Premium	Total Claim
					Collection (%)	Paid (%)
2062/063	3,659,069	88,642,822	95,149	6,245,769	4.13	1.52
2063/064	5,608,397	98,875,747	367,549	10,784,138	5.67	3.41
2064/065	2,935,902	108,149,475	159,563	10,900,731	2.71	1.46
2065/066	4,747,253	137,284,073	182,246	15,400,699	3.45	1.18
2066/067	9,218,835	183,367,850	253,406	23,806,398	5.02	1.06
Mean					4.19	1.72
S.D					1.06	0.85
CV					25.3	49.42

Figure: 4.4





Engineering insurance premium holds mediocre portion in this company. In the above presented table, the highest premium is collected during the fiscal year 2063/064 which stands 5.67% and at the same fiscal year is the highest engineering claims paid as well which stands 3.41%. The following fiscal year, we can see a fall in the premium collection by 2.96% and as well as we can witness a downfall in the claims paid by 1.95%. But after the fiscal year 2064/065 the company experienced growth in premium collection which stood at 3.45% and 5.02% during the fiscal year 2065/066 and 2066/067 respectively. Where the premium collection showed growth; the claims paid has decreased after the fiscal year 2063/064. The claims paid are 1.46%; 1.18% and 1.06% during the fiscal year 2066/067 respectively.

The above table shows that engineering claims is a smaller portion to total claim paid. But, comparing the collection of premium and claim paid, we can't say it is a less risky business.

4.1.1.5 Miscellaneous Premium Collection to Total Premium Collection and Miscellaneous Claim Paid to Total Claim Paid

Insurance considers various policies in miscellaneous insurance. Therefore it is a major source of premium collection. This ratio is used to measure the contribution of miscellaneous premium collection towards total premium collection and misc. claim paid to total claim paid of the company. It shows the percentage of share hold by miscellaneous premium collection and claim in total collection and claim paid by the company. The following equation is used to measure it:

Miscellaneous Premium Collection to Total Collection

 $X \frac{\text{Misc. Premium Collection}}{\text{Total Premium Collection}}$

And.

Misc. Claim Paid to Total Claim Paid = $X \frac{\text{Misc. Claim Paid}}{\text{Total Claim Paid}}$

Table: 4.5

Miscellaneous Premium Collection to Total Premium Collection and

Miscellaneous Claim Paid to Total Claim Paid

Fiscal			Misc.	Total	Misc. Premium	Misc. Claim
Year	Misc.	Total	Claim	Claim	Collection to	Paid to Total
	Premium	Premium	Paid	Paid	Total Premium	Claim Paid
	Collection	Collection			Collection (%)	(%)
2062/063	8,563,582	88,642,822	1,190,647	6,245,769	9.66	19.06
2063/064	8,546,508	98,875,747	678,686	10,784,138	8.64	6.29
2064/065	18,673,452	108,149,475	3,222,625	10,900,731	17.27	29.56
2065/066	18,749,516	137,284,073	5,338,494	15,400,699	13.65	3.46
2066/067	18,304,468	183,367,850	1,193,125	23,806,398	9.98	5.01
Mean					11.84	12.67
S.D					3.2	10.10
CV					27	79.72

Figure: 4.5





Miscellaneous premium holds smaller portion in this company. The highest premium collection of this company is17.26% in the year 064/65 and lowest contribution is 5.74% in the year 060/61. Firstly it is increasing trend up to the year 062/063 and then there is a steady drop. Again the miscellaneous premium collection dramatically increased to 17.27% in the year 064/65. The average misc. premium collection to total premium collection in this 5 years period is 11.84%.

Since the portion of premium of Misc. insurance is smaller, the claim paid to this sector is also smaller to total claims paid.

The claim paid of misc. insurance to total claim paid shows fluctuating trends. The highest portion is 29.56% in the year 064/65 and lowest portion is 3.46% in the year 2065/066. Claim paid is more than premium collection in the year 2062/063 and 2064/065 because the total premium is calculated considering the reinsurance

premium. The average claims paid within five years (2062/063-2066/067) are 12.67% and Standard deviation and C.V. are 10.10 and 79.72.

4.1.2 Evaluation of Investment Position and Composition through Financial Tools

All the concept of insurance and investment are mentioned in the above chapter, which may show the detail of insurance business. Here, only quantities analysis is mentioned which are related to the investment and investment position.

For the purpose of the evaluation of the investment position and composition among the portfolio the trend analysis is used. For the comparison of all respective matter on investment, the mean, standard deviation and coefficient of variance is also used. Likewise, to evaluation the return on respective portfolio and investment amount the ratio analysis is also used. To attain the objectives of the study purpose all the concerned studies and analysis are also used. Basically this evaluation chapter is separated into two parts as financial analysis and statistical analysis the purpose of this part is to study, evaluate and analysis those major matters, which are related to the investment position and composition of PICL. This analysis moves along with studies objective therefore only those ratios are calculated and analyzed which are very important to evaluate in investment policy, position for this purpose are mentioned below:

4.1.2.1 Investment on Govt. Saving Bonds to Total Investment

This ratio shows the proportion of investment on government saving bond. The entire insurer invests its fund to making separate portfolio. It is known as secured investment instrument. The ratio measures the percentage of investment of the insurer in the government saving bond. This ratio is calculated by using this equation:

Govt. Bond to Total Investment $X \frac{\text{Investment on Govt. Bond}}{\text{Total Investment}}$

Table: 4.6

Investment on Govt. Saving Bonds to Total Investment

Fiscal Year	Govt./NRB	Total	Investment on Govt. Bond
	Bond	Investment	to Total Investment
2062/063	18,075,000.00	123,947,679.00	14.58
2063/064	18,075,000.00	120,786,429.00	14.96
2064/065	18,075,000.00	110,466,429.00	16.36
2065/066	25,500,000.00	116,520,000.00	21.88
2066/067	25,500,000.00	165,020,000.00	15.45

Sources: PICL Annual Reports

s



Investment on Govt. Saving Bonds to Total Investment



There is fluctuation in investment in government saving bonds to total investment. According to the table the high portion of investment on govt. saving bond to total investment of PICL is 16.36% in the year 064/65 and least is 14.58% in the fiscal year 2062/063.

4.1.2.2 Investment on Bank Fixed Deposits to Total Investment

It is the ratio that measures the weight of bank fixed deposits investment to total investment made by the company. It is computed, here, using following equation:

Investment on Bank Fixed Deposits to Total Investment

X Investment on Bank Fixed Deposit Total Investment

Table: 4.7

Investment on Bank Fixed Deposits to Total Investment

Fiscal Year	Fixed Deposit at	Total	Fixed Deposit at Commercial
	Commercial Bank	Investment	Bank to Total Investment (%)
2062/063	81,000,000.00	123,947,679.00	65.35
2063/064	71,000,000.00	120,786,429.00	58.78
2064/065	56,000,000.00	110,466,429.00	50.69
2065/066	65,000,000.00	116,520,000.00	55.78
2066/067	110,000,000.00	165,020,000.00	66.65
Mean			59.45
S.D			5.95
CV			10

Figure: 4.7



Investment on Bank Fixed Deposits to Total Investment

PICL has invested its major portion of investment in bank fixed deposit. Investment on Bank fixed deposits in relation with total investment of PICL does display some sign of fluctuation. Its highest contribution is 66.65% in the year 2066/067 and the lowest is 50.69% in the year 064/65. Analyzing the above graph, we can see a downwards movement from the fiscal year 2062/063 to 2064/065. And after the fiscal year 2064/065 we can witness upward movement till the fiscal year 2066/067.

4.1.2.3 Investment on Fixed Deposit at Development Bank/ Financial Institute to Total Investment

It is the ratio that measures the weight of development bank/ financial institute fixed deposits investment to total investment made by the company. It is computed, here, using following elution:

Investment on Fixed Deposit at Dev. Bank/ Financial Institute to Total Investment

X Investment on Dev. Bank/Financial Institute Fixed Deposit Total Investment

Table: 4.8

Investment on Fixed Deposit at Development Bank/ Financial Institute to Total Investment

Fiscal Year	Fixed Deposit at Dev.		Fixed Deposit at Dev.
	Bank/Financial Institute	Total	Bank/Financial Institute
		Investment	to Total Investment (%)
2062/063	16,161,250.00	123,947,679.00	13.04
2063/064	23,000,000.00	120,786,429.00	19.04
2064/065	23,000,000.00	110,466,429.00	20.82
2065/066	26,250,000.00	116,520,000.00	22.52
2066/067	28,000,000.00	165,020,000.00	16.96
Mean			18.47
S.D			3.32
CV			17.5

Figure: 4.8





The second major sector of investment of this company is Fixed Deposit at Dev. Bank/ Financial Institute. According to the above tablet the highest portion of investment in this sector is 22.52% in the fiscal year 2065/066 and least is 13.04% in the year 062/63. The graph shows a steady growth of investment in this sector (i.e. fixed deposit at dev. bank/ financial institute) till the fiscal year 2065/066 and then a downward movement from there on.

4.1.2.4 Investment on Other Investment to Total Investment

Other Investment means other than aforesaid investment i.e. Govt. /NRB Bond/ Debenture, Bank Fixed Deposit, etc. like Insurance pool, NCM Mutual Fund etc. It is the ratio that measures the weight of other investment to total investment made by the company. It is computed, here, using following elution: Investment on Other Investment to Total Investment = $\frac{\text{Other Investment}}{\text{Total Investment}}$

Table: 4.9

Investment on Other Investment to Total Investment

Fiscal Year	Other Investment	Total Investment	Other Investment to
			Total Investment
2062/063	8,711,429.00	123,947,679.00	7.03
2063/064	8,711,429.00	120,786,429.00	7.21
2064/065	13,391,429	110,466,429.00	12.12
2065/066	13,391,429.00	116,520,000.00	11.49
2066/067	13,391,429.00	165,020,000.00	8.11
Mean			9.19
S.D			2.17
CV			23.61



Investment on Other Investment to Total Investment



We can witness steady upward movement and again a downward movement in investment on other investment portion to total investment. Its highest contribution is 12.12% in the year 064/65 and the least is 7.03% in the fiscal year 2062/063. The portion of investment in this sector is dramatically increased in the fiscal year 2064/065 then after decreased in the fiscal year 2065/066 and the fiscal year 2066/067. As a whole, it shows increasing trend from the fiscal year 2062/063 to the fiscal year 2064/065 and then again decreasing trend from the fiscal year 2064/065 to the fiscal year 2066/067.

4.1.2.5 Investment to Total Premium Collection Ratio

It is rate of average premium investment. It shows the rate of investment with comparison on premium collection. This ratio measures the investment ratio in percentage. This ratio helps to show what proportion of collected premium is invested in different sector in aggregate. That ratio is calculated by using this formula:

Investment to Total Premium Collection Ratio = $\frac{\text{Investment}}{\text{Total Premium Collection}}$

Table: 4.10

Fiscal Year	Total Investment	Total Premium	Total Investment to Total
		Collection	Premium Collection (%)
2062/063	123,947,679.00	88,642,822.00	139.8
2063/064	120,786,429.00	98,875,747.00	122.1
2064/065	110,466,429.00	108,149,475.00	102.14
2065/066	116,520,000.00	137,284,073.00	84.87
2066/067	165,020,000.00	183,367,850.00	89.99
Mean			107.78
S.D			20.53
CV			19.04

Investment to Total Premium Collection Ratio

Figure: 4.10



Investment to Total Premium Collection Ratio

The ratio between total investments to total premium collection displays a very decreasing trend. Looking at the line graph above we can witness a downfall from the fiscal year 2062/063 which stood at 139.8% to 122.1% in the fiscal year 2063/064. And again a very steady downfall can be witnessed till the fiscal year 2065/066 which stood at 84.87%. And then after the fiscal year 2065/066 a very slim growth can be seen in the fiscal year 2066/067; where a growth of mere 5.12% is recorded by the company.

4.1.3 Interest Earned to Total Investment Ratio

This ratio represents the return from interest in total investment. Total interest earned to total investment ratio reflects the extent to which insurer is successful to earn interest as major income on total investment. This ratio actually reveals the earning capacity of an insurance company by investing its all collected premium and other capital fund. Higher the ratio higher will be the income as interest. The ratio calculated used by following equation.

Interest earned to total Investment Ratio = $\frac{\text{Total Interest Earned}}{\text{Total Investment}}$

Table: 4.11

Fiscal Year	Interest Earned	Total	Interest Earned to
		Investment	Total Investment (%)
2062/063	9,708,424.00	123,947,679.00	7.83
2063/064	9,948,737.00	120,786,429.00	8.23
2064/065	9,417,559.00	110,466,429.00	8.53
2065/066	9,577,765.00	116,520,000.00	8.21
2066/067	17,424,896.00	165,020,000.00	10.55
Mean			8.67
S.D			0.97
CV			11.19

Interest Earned to Total Investment Ratio

Sources: PICL Annual Reports



Interest Earned to Total Investment Ratio

Figure: 4.11

The above table describes a ratio of interest earned to total investment of the company.

The line graph displays an increasing trend from the fiscal year 2062/063 to 2064/065 and then a slight decrease from the fiscal year 2064/065 can be seen in the fiscal year 2065/066 which; as a result happened due to the fall in ratio between interest earned to total investment from 8.53% in the fiscal year 2064/065 to 8.21% in the fiscal year 2065/066. But after the fiscal year 2065/066 the company experienced a growth of 2.34% in the following fiscal year of 2066/067.

4.1.4 Total Claim Paid to Total Premium Collection

It is the ratio that measures the total risk involves in total premium collection by the company. This relation reveals the portion of total premium that goes to total claim paid by the company. It is computed here, using following equation:

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

Fiscal Year	Total Claim Paid	Total Premium	Total Claim Paid to Total
		Collection	Premium Collection (%)
2062/063	62,456,79.00	88,642,822.00	7.05
2063/064	10,784,138.00	98,875,747.00	10.91
2064/065	10,900,731.00	108,149,475.00	10.08
2065/066	15,400,699.00	137,284,073.00	11.21
2066/067	23,806,398.00	183,367,850.00	12.98
Mean			10.44
S.D			1.95
CV			18.68

Table: 4.12

Total Claim Paid to Total Premium Collection

Figure: 4.12



Total Claim Paid to Total Premium Collection

The above table describes a ratio of total claims paid to total premium collection of PICL. The highest portion of claims paid is 12.98% of total premium collection in the fiscal year 2066/067 and lowest portion is 7.05% in the year 062/63. The average claim paid to total premium collection in this 5 years period is 10.44%.

4.2 Statistical Analysis

Under this chapter various statistical tools are studied which are related to decision making for premium collection and investment position. The trend analysis and coefficient of correlation are used for the purpose to find out tendency, relation and distinguish between premium collection investments. For this purpose following measures are analyzed.

4.2.1 Correlation Analysis

In this analysis product moment method has been used to find out the relationship between premium collection and investment. Generally, the correlation analysis is used to describe the degree to which one variable is related to another. Hence, in statistics, it is used in order to depict the co-variance between two of more variables. It helps to determine whether: 1) a positive or negative relationship exist; 2) The relationship is significant or insignificant and 3) Establish cause and effect relation 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 is based on following interpretation:

When r = +1, there is perfect positive correlation.

When r = -1, there is perfect negative correlation.

When r = 0, there is no correlation.

When 'r' lies "between" (0.7 to 0.999), there is high degree of positive correlation.

When 'r' lies "between" (-0.7 to -0.999), there is high degree of negative correlation.

When 'r' lies "between" (0.5 to 0.699), there is a moderate degree of correlation.

When 'r' is less than 0.5, there is low degree of correlation.

Probable Error

Probable error of the correlation coefficient denoted by P. E. is the measure of testing the reliability of the calculated value of "r". If r be the calculated value of "r" from a sample of n pair of observations, then P. E. is defined by

P. E. =
$$0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

It is used for the interpretation that whether calculated value of "r" is significant or not.

- i. If "r" < P. E., it is insignificant. So, perhaps there is no evidence of correlation.
- ii. If "r" > 6 P. E., it is significant.

In other cases, nothing can be done.

The probable error of correlation coefficient may be used to determine the limits within which the population correlation coefficient lies. Limits for population correlation coefficient are $r \pm P.E$.

4.2.1.1 Correlation between Premium Collection and Investment of PICL

Table: 4.13

Correlation between Premium Collection and Investment of PICL

Coefficient of	Relationship	r ²	6 x P. E.	Probable error	Sig./
Correlation (r)				P. E. (r)	Insig.
0.25	Prefect positive	0.0625	1.6998	0.2833	Significant
	correlation				

Source: - Appendix VII

From the above computation, we can draw the conclusion there is a high degree of positive co-relation between the premium collection by PICL and its investment.

Again, the co-efficient of determinants (r^2) is the measure of the degree of liner association or correlation between two variables one of which is the dependent variable and other is independent. In case of PICL, the co-efficient of determinants is 1.4462, which means that the variation is dependent variable (Premium collection), (see Appendix VII)

Generally probable error is used to measure the significant 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 co-efficient. Since the co-efficient of correlation (r) is more than the 6 P. E. (r), therefore we conclude that the relation between the two variables is significant.

4.2.1.2 Correlation between Premium Collection and Claim Paid by PICL

Table: 4.14

Coefficient of	Relationship	r²	6 x P. E.	Probable	Sig./Insig.
Correlation (r)				error P. E. (r)	
0.9884	High Degree of	0.9769	0.0414	0.0069	Significant
	Positive				
	Correlation				

Correlation between Premium Collection and Claim Paid by PICL

Source: - Appendix VIII

From the above computation, we can draw the conclusion that there is high degree of positive co-relation between the premium collection by PICL and claim paid.

Again, the co-efficient of determinants (r^2) is the measure of the degree of liner association or correlation between two variables one of which is the dependent variable and other is independent. In case of PICL, the co-efficient of determinants is 0.9769, which means that the variation is independent variable (Premium collection) explains 97.69% of the dependent variable (claim paid) (see Appendix VIII).

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

4.2.1.3 Correlation between Interest Earned and Investment of PICL

Table: 4.15

Coefficient of	Relationship	r ²	6 x P. E.	Probable error	Sig./Insig.
Correlation				P. E. (r)	
0.9824	High degree of	0.9651	0.063	0.0105	significant
	positive				
	Correlation				

Correlation between Interest Earned and Investment of PICL

Source: - Appendix IX

From the above computation, we can draw the conclusion there is a high degree of positive co-relation between the interest earned by PICL and its investment.

Again, the co-efficient of determinants (r^2) is the measure of the degree of liner association or correlation between two variables one of which is the dependent variable and other is independent. In case of PICL, the co-efficient of determinants is 0.9651, which means that the variation is independent variable (investment) explains 96.51% of the dependent variable (interest) (see Appendix IX).

Generally probable error is used to measure the significant of the relation between two variables. In case of this study the significance relationship between interest 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 significant.

4.2.1.4 Standard Deviation and Coefficient of Variance Analysis

The corresponding relative measure of dispersion is known as the co-efficient of variation. It is used in such problems where the study needs to compare the variability of two or more then the series. The higher co-efficient of variation of series refers more variable or less consistency or loss uniformity and vice versa.

In this study, the coefficient of variation is calculating the measure the variability on premium of various insurance

Insurance	Fiscal Year					Meen	SD	CV
	062/63	063/64	064/65	065/66	066/67	Wican	5.D.	
Fire	0.51	-0.61	1.90	3.06	2.69	1.51	1.073	71.06
Marine	0.38	4.34	2.65	3.85	2.37	2.71	1.38	50.92
Motor	24.85	36.55	25.66	18.98	26.05	26.41	10.76	71.25
Eng.	2.60	6.55	5.43	3.83	2.74	4.23	1.54	36.4
Misc.	13.90	7.94	17.26	28.47	6.51	14.81	7.89	53.27

Table: 4.16Claim Paid to Premium Collection (%)

Sources: PICL Annual Reports





Claim Paid to Premium Collection (%)

The above table shows the relationship between claim paid and premium collection of different products. According to the standard deviation and C. V. motor insurance which standard deviation are 10.76 and C.V is 71.25% seems more risky then other business of PICL and fire and marine businesses are less risky which S.D and C.V are 1.073, 71.06% and 1.38, 50.92% respectively. The
other businesses look moderately risk but still seem safer businesses with respect to motor business.

4.3 Future Predictions

The future predictions of Premium collection and Investment are done using the Time Series Analysis for the next two fiscal years i.e. from FY 20667/68 to FY 2068/69.

4.3.1 Time Series Analysis to predict the Premium Collection of PICL

The predicted values of Premium collection of PICL using Time Series Analysis for the next two years (from FY 2065/66 to FY 2066/67) are presented in the table 4.17.

Table: 4.17

Predicted Values of Premium Collection of PICL

(Rs. In million)

Fiscal Year	Premium Collection
2062/63	88.64
2063/64	98.87
2064/65	108.14
2065/66	137.28
2066/67	183.36
2067/68	191.57
2068/69	214.36

Source:- Appendix X

Table 4.17 is thus calculated as shown below:

Computation of Predicted Values of Premium Collection using Time Series

		-		
Fiscal	(Y) Premium		XY	\mathbf{X}^2
Year (t)	collection	X=t-		
	(Rs. in million)	2065		
2062/63	88.64	-2	-177.28	4
2063/64	98.87	-1	-98.87	1
2064/65	108.14	0	0	0
2065/66	137.28	1	137.28	1
2066/67	183.36	2	366.72	4
N = 5	Y= 616.29	X=0	X Y=227.85	X ² =10

Analysis

Source: PICL Annual Reports

Here,

 $Y_c = a + bX.....(i)$

Since,

X = 0,
$$a = \frac{Y}{N} = 616.29/5 = 123.2$$

 $b = \frac{XY}{X^2} = 227.85/10 = 22.78$

Putting the values of a and b in equation (i),

 $\hat{Y}_c = 123.2 + 22.78 \text{x}$

For the FY 2067/68, X = 3;

 $\dots \hat{Y}_{2067/68} = 123.2 + 22.78(3) = \text{Rs. 191.57}$ million

For the FY 2068/69, X = 4;

$$...\hat{Y}_{2068/69} = 123.2 + 22.78 \ (4) = \text{Rs. } 214.36 \text{ million}$$





Predicted Values of Premium Collection of PICL

The premium collection of PICL is in increasing trend till the F/Y 2068/69. According to the prediction, the premium collection will increase in the F/Y 2067/68 as well. The predicted value of premium collection for the F/Y 2067/668 is Rs.191.57 million which is greater than that of F/Y 2066/67 where the premium collection **is** Rs.183.36 million. In F/Y 2068/69, the premium collection will reach to Rs.214.36 million according to the prediction which is more than that of F/Y 2066/67.

4.3.2 Time Series Analysis to predict the Investment Position of PICL

The predicted values of Investment position of PICL using time series analysis for the next two fiscal years (from FY 2066/67 to FY 2068/69) are tabulated as (table 4.18):

Table: 4.18

Predicted Values of Investment Position of PICL

(Rs in million)

Fiscal Year	Investment Position
2062/63	123.94
2063/64	120.78
2064/65	110.46
2065/66	116.52
2066/67	165.02
2067/68	150.71
2068/69	158.5

Source: - Appendix XI



Predicted Values of Investment Position of PICL



The investment position of PICL is in fluctuating trend. As stated in table and figure, the predicted value of investment will decrease to Rs.150.71 million in the F/Y 2067//68 as compared to the fiscal year 2066/67 which is Rs.165.02 million.

The investment position will reach to Rs.158.5 in the F/Y 2068/69 million according to the prediction which is more than that of F/Y 2067/68.

4.4 Major Findings of the Study

Based on the data provided by the concerned company, the above analysis has been made and based upon these the main findings of the study can be drawn.

-) Fire insurance premium hold one of a major portion of the total premium in the company. Above table shows the average of fire premium to total premium collection of the insurer. According to the table highest contribution of PICL is 30.43% in the year 2065/066 and lowest is 23.35 % in the year 2063/064. The average fire premium collection to total Premium collection in this 5 years period is 26.69%.
-) The claim paid to fire insurance has a decreasing trend till the fiscal year 2063/064. The highest portion of fire claims to total claims is 8.30% in the fiscal year 2065/066 and lowest is (1.31%) in the year 063/64. It shows negative amount in the year 063/64 because of large outstanding amount in the previous fiscal year. We can say that the fire insurance is a most profitable and less risky business of this company.
-) One of a major portion of premium collection in this company is Marine insurance premium along with the fire premium collection as we have already discussed above. The highest premium collection of Marine insurance premium of PICL is 39.97 % in the year 062/63 and lowest contribution in the fiscal year 2066/067, which is 14.55%.
-) The claim paid of marine insurance to total claim paid has shows some fluctuating trends. The highest portion of the marine claim paid is in the fiscal year of 2063/064 which is 15.79%; and lowest portion is 2.13% in the year 062/63.
-) The contribution of Motor premium collection displays a very uneven trend. We can see a growth of mere 1.21% from the fiscal year 2062/063 to

2063/064, which decreases in the following fiscal year by 0.75%. In the fiscal year 2065/066 the company has a commendable growth in the premium collection.

-) The Motor claim paid table displays as uneven trend as the premium collection table of the same. We can witness a pinch of growth (0.32%) in the claim paid from the fiscal year 2062/063 to the fiscal year 2063/64. But a huge decrease of 20.12% in the claim paid can be seen in the fiscal year 2064/065, which comes down to 55.70%.
-) Engineering insurance premium holds mediocre portion in this company. In the above presented table, the highest premium is collects during the fiscal year 2063/064 which stands 5.67% and at the same fiscal year is highest engineering claims paid as well which stands 3.41%. The following fiscal year, we can see a fall in the premium collection by 2.96% and as well as we can witness a downfall in the claims paid by 1.95%.
-) There is fluctuation in investment in government saving bonds to total investment. According to the table the high portion of investment on govt. saving bond to total investment of PICL is 16.36% in the year 064/65 and least is 14.58% in the fiscal year 2062/063.
-) PICL has invested its major portion of investment in bank fixed deposit. Investment on Bank fixed deposits in relation with total investment of PICL does display some sign of fluctuation. Its highest contribution is 66.65% in the year 2066/067 and the lowest is 50.69% in the year 064/65.
-) The second major sector of investment of this company is Fixed Deposit at Dev. Bank/ Financial Institute. According to the above tablet the highest portion of investment in this sector is 22.52% in the fiscal year 2065/066 and least is 13.04% in the year 062/63.
-) The company has witness steady upward movement and again a downward movement in investment on other investment portion to total investment. Its

highest contribution is 12.12% in the year 064/65 and the least is 7.03% in the fiscal year 2062/063.

-) The analysis shows motor insurance seems more risky then other business of PICL and fire and marine business are less risky. According to the figure it seems fire insurance is the most profitable business in this company from claims point of view the ratio between total investments to total premium collection displays a very decreasing trend.
-) The findings describe an increasing trend of ratio of interest earned to total investment of the company. The study displays an increasing trend from the fiscal year 2062/063 to 2064/065 and then a slight decrease from the fiscal year 2064/065.
-) When values are predicted for the next two fiscal years the premium collection shows an increasing trend whereas investment has displayed downward movement in the coming two fiscal years.

CHAPTER – V

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

The brief introduction of this study has been already presented in the first chapter. In the second chapter, the available literature about the premium collection and investment position has been reviewed. Research methodology has explained in the third chapter. And the available data have been presented and analyzed in the fourth chapter.

This is a last chapter of this study. In this concluding chapter, an attempt has been made first to make present summary of the study, then conclusion of the analysis and some recommendations, which are useful to take corrective actions from the side of concerned company.

5.1 Summary

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 refereed to as financial intermediaries. In the modern society and 21st centuries Business age it plays vital role through risk bearing and providing certainty. Therefore insurance is an assts of world's economy.

Among the 25 insurance companies, this present study has been taken to evaluate the premium collection and investment position of PICL. The study analyzed the annual report of five years starting from 2062/063 to 2064/065 has been taken into consideration for the purpose of the study.

In the context of Nepal, insurance business is one of the businesses, which has not yet suffered any loss and is generating profit from the date of its establishment till now. But the trend of premium collection, investment and profit earned seems fluctuating. Insurance premium is the life and blood of Insurance Company. Therefore, to succeed, the insurance companies should be able to increase premium earning. In other words insurance companies may flourish only with the significant increment in premium earning. The analysis of premium is very crucial to give meaningful inference on financial performance of insurance companies. It is needed to restudy and reanalyzed as per present condition and situation. The insurance acts and regulations 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.

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 Prudential Insurance Company 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 views of the premium collection and investment position of PICL. On the basis of study some findings and recommendations are identified, which are useful to improve the future of PICL on the premium and investment sector.

To conclude this study, the whole study has been divided into five chapters of different aspects. The summary of each chapter can be presented in the following paragraphs.

'Introduction ' provides the brief introduction of this study. The historical background of insurance industry in Nepal shows the contribution for the development of industrial sector in Nepal. The establishment of PICL is an example of that evidence. So, this study tries to evaluate premium collection and investment position of insurance company. The main objective of the study is to

high light the premium collection and investment position of prudential insurance company.

The literatures related to the capital structure have been reviewed in the second chapter. In this chapter, the theoretical review and empirical review i.e. review of related studies has been presented separately. From the theoretical review section, we may take advantages of conceptual foundation of premium collection and investment position of insurance companies in Nepalese contest. Similarly, by reviewing some previous studies, many inputs can be taken for this study and other researchers can also take advantages from this section.

Third chapter explains about the Methodology of this study. Mostly the secondary data are used in this study. This study covers the five years data of PICL. Descriptive and analytical research design has been used in this study. Financial as well as statistical tools are used. This includes ratio analysis, correlation analysis probable error and trend analysis.

Data are presented and analyzed in the fourth chapter. Data analysis tools mentioned in the third chapter is used to analyze the data in this chapter. Various ratios that are related to the premium collection and investment position, correlation analysis between two variables, trend analysis etc. have been used to evaluate the premium collection and investment position.

5.2 Conclusions

Based on the data provided by the concerned company, the above analysis has been made. And based on the main findings of the study as revealed in the analysis, the following conclusion can be drawn.

Fire insurance premium is able to maintain 26.69% average ratios. Its claim paid ratio is the smallest portion to total claims paid which stands at 3.92%. So it is most profitable business of the company.

- One of the major portions of premium collection of this company is, marine insurance holds the average premium of 29.95% and average claim paid of 7.43% which shows that marine insurance is riskier than Fire insurance.
-) The contribution of motor premium collection displays a highly fluctuating trend. There is dramatically decrement and gradual increment in motor insurance premium which is most risky. The average premium collected by the business stood at 27.30%. Though the premium collected shows high average, the claim so paid in the motor business is also high at the same time which stands at 67.99%, which is; in fact the business which has paid the most claim of the total claims paid.
-) Engineering insurance premium holds smallest portion in this company having fluctuating trend in premium collection ratio and claim paid ratio which seems to be risky business. The average premium collected in the engineering sector of business stands at 4.19% and the claims paid stands at 1.72%.
-) Miscellaneous premium also holds smaller portion in this company. The premium collection and claim paid ratio to this sector is smaller. On the basis of findings of the study it can be concluded that this sector is profitable sector of this company.
-) According to the analysis of investment position of this company in different sector of investment, the investment position seems good but not satisfactory. There is fluctuating trend of investment in this company in different sectors. This sector seems to be less risky sector.
-) The ratio of interest earned on total investment of the company has gradually increased till the fiscal year 2065/66 but the company has experienced a steep growth in the fiscal year 2066/67.

) While analyzing the annual trends of premium collection and investment, it can be expected that the situation will improve as the increasing pattern of premium collection is a witness of the prediction.

5.3 Recommendations

Based upon the above-mentioned issued and constraints some recommendations have been made. These guidelines would help in taking prompt decision in relation to premium collection and investment.

- Fire insurance premium is in fluctuating trend. As fire insurance is the most important part of insurance business, its average premium collection is good but not satisfactory. So it is suggested to give more attention in fire business to collect the premium. Fire claim paid is also in fluctuating trend. This is good for the company due to the decreasing trend of claim paid ratio.
-) Marine Insurance premium collection holds the highest portion premium in total premium which is good signal for the company. But the claim ratio is in fluctuating trend. So the company should be selective in marine insurance to maintain claim ratio and profitability.
-) Motor insurance is the good source of raising insurance premium, but it seems most risky business of the company. The highest portion of the total claims was adopted by the motor claim. So, the company should take good strategies for taking vehicle business.
-) Engineering and Miscellaneous insurance premium hold fewer portions in total premium collection. Both have premium collection ratio in fluctuating trend and claim paid ratio also in fluctuating trend. Even though these business are profitable so, the company should give more emphasis in such type of business for company growth.

-) According to the analysis of investment position of this company in different sector of investment it seems good but not satisfactory .For this; the company should select more returnable and less risky sector of investment.
-) For excellent investment decision as well as new product, company should make independent research and development department. R&D department will help, to meet future goals of the company as well as the betterment of the company.
-) Insurance premium should be invested in different sector other than government saving bond in order to enhance the life standard of people, thereby increasing the insurance premium.
-) The entire insurance should follow the investment policy and should maintain and make uniformity on premium collection under all insurance policies and should try to reduce in claim paid amount.
-) The entire insurer should try to increase customer service by providing different facilities and to withdraw unnecessary process on insurance and followed scientific insurance system.
-) The company is suggested to expand its insurance activities in rural area by establishment of branches or by appointment of agents according to its potentiality.
-) The insurance act and 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 overall macroeconomic and money and capital market condition.