Chapter - One

Introduction

1.1. Background of the Study

Human life is full of risks and uncertainty. Each and every step of life is full of risks. We cannot eliminate risk. However, we can make provision for financial security against risk. Insurance is the means to get financial security against risk. Insurance is a way of reducing uncertainty of occurrence of an event. Insurance is an investment, from which we get return only when certain loss occurred from predetermined incident.

Insurance has wide scope and areas nowadays. It is related with risk. It is better to understand the meaning of risk before defining insurance. Risk is the main source of loss and insurance is the mechanism of covering such losses. Risk is defined as uncertainty as to loss, poses a problem to individuals in every walk of life. Households, business people employees, travelers, investors, etc all must face risk and develop ways to handle it. If a cost or a loss is certain to occur, it may be planned for in advance and treated as a definite, known expense. On the contrary, when there is uncertainty about the occurrence of a cost or loss that risk becomes an important problem to people. Some people are risk averse while some are not. The probability of occurrence of such loss is equally likely. It is therefore, risk adverse people are interested to cover such loss through certain mechanism. The easiest way of handling risk is insurance.

Insurance is one of the major risk handling methods or it is an economic institution that reduces risk by combining under one management a group of objects so situated that the aggregate accidental losses too which the group is subject become predictable within narrow limits.

The growth of contractual saving institution is the outcome of necessity of people to protect themselves from risks of loss of life and properties. At the same time, people need surplus income as precautionary measure to have comfortable living during old age. As a result of these felt-necessities, insurance companies became powerful emerging contractual savings institutions since people contributed by way of premiums to purchase different kinds of insurance policies to protect against risks of life and properties.

1.2. Origin of Insurance

The origin of insurance is in antiquity. The earliest traces of insurance in the ancient world are found in the form of marine trades' loans or carriers contracts. The ideas of insurance were made in Babylon and India at quite an early period. In regard, references were made to the concept "yogksem", more or less kin to the well being and security of the people. The codes of Mary had recognized the divisibility of provision for sharing the future losses. However, there is no evidence that insurance in its present form was practiced in the twelfth century.

Insurance was developed into a business due to the rapid expansion of trade from Europe to all parts of the world and the serious losses being sustained by merchants to their ships and valuable cargoes due to not only the "Acts of God" on the high sea but also from pirates and various wars in the sixteenth and seventeenth centuries. *(Shrestha and Bhandari, 2007:386)*

The marine insurance was the oldest form of insurance under bottomward bond. If the ship was lost, the loan and interest were forfeited. Many times there were several risks like robbery by pirates or got sunk in the deep waters. Therefore, to safeguard them, marine insurance was developed. After marine insurance, fire insurance developed. It had been organized in Germany in the beginning of sixteenth century and its office was established in 1691 in England. Life insurance made its first appearance in England. The first recorded evidence in England being the policy of life of William Gibbons on June 18, 1653. Even before this date annuities had become quite common in England. The first registered life became quite common in England and the first office was established in 1696 in England. The miscellaneous insurance took the present shape at the alter part of nineteenth century with the industrial revolution in England.

To protect themselves, they formed associations whereby a percentage of the value of the expected risk was put into a common fund for the benefit of nay member suffering loss. A favorite meeting place was London coffee house owned by Edward Lloyds of London. These were the world famous insurance organizations that began business from their small premises.

Later on, joint stock companies as underwriters at Lloyds were founded and it is still in business today although the insurance office was incorporated in 1710. The international diversification of risk was made possible since London was famous as a center of risk diversification. *(Shrestha and Bhandari, 2007:386)*

1.2.1. Development of Insurance in Nepal

The modern insurance in Nepal was developed only after the establishment of the first commercial bank, Nepal Bank Limited and some other industries like Biratnagar Jute Mill, Juddha Match Factory, etc. At 1992 B.S., Rana Prime Minister Juddha Shumsher Jung Bahadur Rana brought the concept of insurance policy in Nepal. At these early period Indian Insurance Company was operating its business in Nepal and there was no such corporation registered in Nepal before 2004B.S. (1947 AD). In 2004B.S. Nepal Beema and Chalani Company was established to make insurance of the trade that took place between India and Nepal. In 2016 B.S.; Nepal Insurance and Transport Company was established with the investment of Nepal Bank Ltd. The business of this insurance company was limited only to the customs of Nepal Bank Ltd itself, which was again renamed as Nepal Insurance Company Ltd. Therefore, the insurance transaction was heavily dependent upon the agents of Indian companies mainly Indian Life Insurance Corporation, Oriented Fire and General Insurance Company, Rubi General Insurance Company and Sterling General Insurance Company.

In 2024, Rastriya Beema Shasthan was established as a limited company under joint venture of public and private sector. This was the first ever established insurance company which started its business from 2024/11/11 by insuring the motor vehicle of Late King Mahendra. In 2025, this private company was changed into corporation and named Rastriya Beema Shansthan which was brought under Rastriya Beema Shansthan Act 2025. In 2024, HMG organized Beema Committee consisting of 5 members which was respondent for the overall operation and management of insurance business in Nepal. The first insurance company established from the private sector was National Life and General Insurance Company Private Limited in 2043B.S. which started its business in 2044.

1.3. Focus of the Study

The study is focused on the non-life insurance policies that are practiced by the Nepalese insurance companies. The study focuses mainly on the premium collection from the various types of non-life insurance policies by the insurance companies of Nepal. The study will also focus on the investment situation and profitability of the respective insurance companies.

Non-Life Insurance

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 risk of insured against some specified cost i.e. the premium. It includes property insurance, liability insurance and other forms of insurance. General insurance considers all the risk and it provided certainty against the risk through certain sum of money. This part of insurance includes the insurance and risk transfer of the property and liability of insured where, “property insurance, against loss arising from the ownership or use of property, included two general classifications. The first indemnifies the insured in the event of loss growing out of damages too, or destruction of, his/her own property, include two general classifications. The first indemnifies the insured in the event of loss growing out of damages too, or destruction of his/her own property. The second form pays damages too, or destruction of, his/her own property. The second form pays damages for which the insured is legally liable, the consequence of negligent acts that result in injuries to other persons or damage to their property. This is known as ‘Liability Insurance’ General insurance responsible to payment of an amount to insured. But, when the accident is held by negligence of insured, where the insurer does not responsible to pay any amount against the risk.

Insurer and insured may agreed to accept every kind of risk under their contract and the risk transfer through the assurance. But the “coverage written by the property and liability insurance insurers may be divided into five types, physical damage or loss, loss of income and extra expenses resulting from physical damage to property, liability, health and surety. (Bickelhaupt, D. L., *198,* pp.80-81)

1.4. Statements of the Problems

Investors and businessmen invest in insurance business. Day-by-day the numbers of insurance companies are increasing in the market. The competition among them has become bottle-neck. But overlooking on the financial statements of most of the insurance companies, they are earning profit each year. However, it is not significant and satisfactory against the volume of the transactions. The volumes of transactions are increasing year by year but the growth of net earning is not in the same ratio.

The awareness about the insurance among the Nepalese is at a primitive stage. Similarly, the insurance companies operating in Nepal are facing a very unfair competition in the market. They could not also gain the confidence from the local investors as well as foreigner. Thus, the performance of the insurance companies in the one and only secondary market is also not doing well. They are also not getting better investment opportunity to utilize the huge amount of fund collected as premium. So, following questions arise in context to the insurance business in Nepal:

- What is the situation of the premium collection by insurance companies?
- What is the state of the insurance companies paying the claim to the insured?
- What is the state of earning of Nepalese non-life insurance companies?

1.5. Objectives of the Study

The main objectives of the study are as follows:

1. To study the premium collection and claim paid on non-life insurance policies especially the fire insurance business.
2. To study the states of provision on re-insurance of non-life insurance policies of the sample companies.
3. To suggest, recommend study

1.6. Limitations of the Study

The study aims at finding the facts and state of the premium collection and claim paid position in Nepalese insurance company. The major limitations of the study are:

1. The study is mainly focused on the premium collection and claim position of the limited non-life insurance companies.
2. The study is mainly concentrated on the fire insurance business of the sample companies.
3. The data analyzed in the study are completely historical and that covers from the F/Y 2059/60 to F/Y 2064/65.
4. The study is based on the secondary data published, by respective company so the result will be bases on validity of data produced.

1.7. Organization of the Study

The whole study is based on secondary data from concerned insurance companies, insurance board and relevant sources. The study incorporates following chapters:

Chapter-I: Introduction: This chapter is introductory and deals with background and preface of the study including general background of the study, problem of the study, objectives of the study, significance of the study, limitation of the study, organizing of the study etc.

Chapter-II: Review of Literature: This chapter incorporates the profound review of available literature related to the area of this study. It is directed towards the review of conceptual framework and review of major related studies. In review the covered literature includes the definition of the insurance, its principles and premium calculation procedures.

Chapter-III: Research Methodology: This unit presents research methodology used in the study which includes various tools and techniques of data. It consists of research method as adopted, sources of data, population and sample, research design, methods of data analysis etc.

Chapter-IV: Presentation and Data Analysis: This chapter presents the analysis and presentation of data by using various methods of statistical and financial tools. Tables, pie charts, etc. will be used accordingly. The statistical will be the different types of test of hypotheses. This chapter also includes major findings of the study.

Chapter-V: Summary, Conclusion and Recommendation: This chapter includes conclusion, recommendation and suggestions for further important.

Chapter – Two

Review of Literature

This part of the study deals with review of prior research and theories. The chapter includes meaning, terminology, functions, principles of insurance, etc. Similarly, method of calculating the premium has also been discussed in the chapter. The reviews of the past studies have also been done in the chapter.

2.1. Meaning of Insurance

The term insurance is related with risk. It is the organized and co-operative management which stands against the causal risks and losses of human life and property. The terms of insurance can be defined in two ways. They are classical and modern definition or functional and contractual definition. According to functional classification, insurance is a cooperative form of distributing certain risks over a group of persons who are exposed to it. According to John H Mager, “Insurance has been defined as plan by which large number of people associate themselves and transfer to the shoulders of all, risks that attach to individuals.”

According to M.K. Gosh and A.N. Agrawal, “Insurance is simply a cooperative form of distributing a certain risk over a group of persons exposed to it.”

According to Contractual definitions, “Insurance is a business which is based on a contract. Insurance is promise by an insurer to an insured of protection service. According to Edwin W. Patterson, “Insurance is a contract by which one party, for a compensation called premium, assumes particular risk of the other party and on specified contingency.”

Hence, there are two aspects of insurance: *Insured* and *Insurer*. The person or institution who bears loss is insurer and next aspect that gets that amount is insured. The amount paid by insured is premium and the document in which the terms of contract are mentioned is insurance policy. Risk is defined as uncertainty as to loss, possess a problem to individuals in every walk of life. When the loss is certain, that can be born as expenses on the contrary when there is uncertainty about the occurrence of loss, that risk becomes an important problem to people. Some people are risk averse while some are not. Risk adverse people are interested to cover such loss through certain mechanism. The easier way of handling risk is insurance.

However, the scope of Insurance is limited in various ways. The certain legal and moral consideration makes it impossible to insure all kinds of risks. The following conditions limit the scope of insurance: -

1. All the risks cannot be insured.
2. There must be insurable interest.
3. Insurance is limited to financial value.
4. There must be large number of similar risk.
5. It must be possible to calculate the risk of loss.
6. Losses must not be catastrophic.
7. Losses must be reasonably unexpected.
8. Losses must be accidental.
9. It must be consistent with the public policy.

2.2. Terminology of Insurance

a) Insurance: A contract where by one party called the insurer agrees for a consideration called the premium, to indemnify the other party, called the insured against losses that may fall on him or his property due to specified causes, subject of courses to certain terms and conditions.

b) Assurance: The equivalent of the word insurance but generally used for life insurance and in some marine insurance policies as well.
c) Insurer: A person who issue the insurance policy or the company which insures.
d) Insured: A person who is protected by a policy of insurance.
e) Insurance Policy: Insurance policy is a written document detailing the terms and conditions of insurance cover granted by an insurer. Normally, an insurance policy will exhibit the following:
    - Name and address of the insurer
    - Name and address of the insured
    - An agreement to insure
    - Particulars of the property covered sum insured and premium
    - Details of perils covered, excluded and conditions.
f) Hazard: An element of danger, which could result in a loss.
g) Underwriter: Person who insures the property.
h) Proximate cause: A real and efficient cause that result in a loss. It need not necessarily be the closest in time to the event. There must be a direct relationship of cause and effect between the peril and loss.
i) Third Party: Any person other than the two main parties namely insured and the insurer involved in a insurance contract.
j) Indemnity: Guarantee of payment after a loss or compensation paid after a loss, but based on rational reasons to make payment.

2.3. Principle of Insurance

a) **Principle of Insurable Interest: -**
Insurable interest is a necessary condition for insurance contract. This principle differentiates insurance contract from wagering contract. In insurance, the insured should have financial interest in the subject matter of insurance. If anyone tries to insure property belonging to others with a view to gain by its loss, it will be a gambling contract and therefore a contrary to the principle of insurable interest. (Bhandari Dilli Raj (2003). 256-262)

b) **Principle of Uberrima fiades or utmost good faith: -** This principle provides aliveness to insurance business. This principle implies that the both parties of insurance contract i.e. insurer and insured, must openly disclose all the material facts or fundamental facts relating to subject matter as it affects the validity of contract. The burden of disclosing material facts lies more on insured as the subject matter is at the disposal and so he knows more about the same. Similarly, the insurer should disclose full facts about coverage provided by the policy. If the full facts are not disclosed, the contract becomes void ab- initio.

c) **Principle of Indemnity: -** This principle implies that nobody should make gain or profit from insurance claims. Insurance indemnifies the insured in such a way that he will just be compensated for the loss. He should neither be allowed to make a profit nor should incur loss from the operation of perils insured against. Insurance is thus a device to get compensated for a loss but, not to make gain from the loss.

d) **Principle of Subrogation: -** Principle of subrogation is a corollary to the principle of indemnity and applies only on fire and marine insurance. Once the insurer indemnifies the insured for his loss, the insurer will acquire a right to seek and obtain subrogation (recovery) from the faulty third parties, which insured could have recovered. Thus, this principle allows the insured to step his feet into the shoes of insured after the payment of insurance claims. So, this principle doesn't allow the insured to receive compensation from others after receiving insurance claims. He has to pass on, his right of recovery from the third parties to insurers.

e) **Principle of Contribution: -** The principle of contribution is the sub- principle corollary to the principle of indemnity. This principle prevents the insured to receive claim from two or more insurers on the same subject matter of insurance. This means one cannot benefit from the double insurance of the same subject matter. If the subject is insured with the two companies and there should be claim, each company will pay the proportionate share. If the company has already paid the full amount of claim, it can ask for contribution of its share of claim from another insurer.

f) **Principle of Probability: -** The principle of probability has a special importance in insurance business. The insurance company fixes the premium on the basis of this principle the premium is determined on the basis of presumption the risk of tomorrow or the risk that happens in future. But such speculation is done on the basis of the event and function that were happened and done in the past and the experiences. The principle that presumes the risk of the experience of the past years, on the basis that may occur in future, is called the principle of probability.

The principle of probability is useful for all types of insurance. On the basis of this principle, the insurance company determines the premium of life, marine, fire and other insurance business. So, from the system of determining the premium on the basis of special data and experience the rate depends on reality.

g) **Principle of Proximate Cause: -** This principle is used in non-life insurance business widely; event may happen due to many causes. If the loss or damage is created by more than one happens due to many causes, it should be found out which cause is the nearest cause for that event (risk) included in the policy. It creates the liability that the insurer should compensate to this loss. So, this principle is called the principle of proximate cause. IF it is the risk out of the policy; certainly, the insurer is not compelled to provide the compensation of the subject matter insured. So, if there are many causes of an event, insurer should pay attention only to the proximate cause. If the proximate cause is in the insurance area the insurer is under an obligation to provide the compensation to the insured. In this way, the proximate cause means the nearest cause of the happening the event. The insurance company should try to find out the reality by studying and evaluating the things that has caused subject matter insured to be damaged.

h) Principle of Mitigation of Loss: - According to this principle, if insured property is damaged or lost, the insured should try to save his property as far as possible, if , while trying to save property by himself, the property, insured is ruined, the insured keeps the right to get compensation of the property damaged. Thus, the liability comes over the shoulder of the insured to try maximum to save the insured property from the loss.

i) Principle of Risk Must Attach: - The next principle of insurance is that for a valid contract of insurance the risk must attach. If the subject matter of insurance ceases to exist (e.g. the goods are burnt) or the insured ship has already arrived safely, at the time the policy is effected, the risk does not attach, and as a consequence, the premium paid can be recovered from the insurers because the consideration for the premium has totally failed. Thus, where the risk is never run, the consideration fails and therefore the premium is returnable, It is a general principle of law of insurance that if the insurers have never been on the risk, they can't be said to have earned the premium.

The risk also does not attach and therefore the premium is returnable where a policy is declared to be void ab-initio on account of some defect, e.g., assured being minor or parties not being ad-idem, But where a policy is void, if there is no "insurable interest." Premium paid can't be recovered because it amounts to "wager" except in the case of marine insurance where the assured is not required to have insurable interest at the time of entering into the contract. Also, the premium can't be recovered, where the policy is avoided by the insurers on the ground of fraud by the insured.

2.4. Basic Characteristics of Insurance

There are four major characteristics of insurance. Overall definitions of insurance can be expressed based on those characteristics. According to the preceding definitions, insurance typically includes the following characteristics: (Singh, Hriday Bir, (2007). 305-307)

1. **Pooling of Losses**

   Pooling is the spreading of losses incurred by the few over the entire group, so that in the process, average loss is substituted for actual loss. It is the heart of insurance. Pooling implies:

   - **The sharing of losses by the entire groups:** For example, assume that 5000taxi drivers of Kathmandu agree that if any accident happens and destroys the vehicles, the other members of the group will indemnify the loss of unlucky driver, who has a loss. If the loss is valued of Rs. 5 lakhs, each driver has to pay only Rs.100.
   - **Prediction of future losses with some accuracy based on the law of large numbers:** By pooling or combining the loss experience of a large number of exposure units, an insurer may be able to predict future losses with greater accuracy. From the viewpoint of the insurer, if future losses can be

predicted, objective risk is reduced. Thus, another characteristic often found in many lines of insurance is risk reduction based on the law of large numbers. For example, if you flip a coin into the air, the probability of getting a head and tail is fifty-fifty percent. If you flip the coin only ten times, you may get a head 2 times. Thus, the observed probability of getting a head is 0.2. However, the true probability is still 0.5. If the coins were flipped one thousand times, the actual; number of heads and tails would be approximately 500 times. Thus, as the number of random tosses increases, the actual results approach the expected results.

Like above illustration, the insurance union or the board collects the data and ratio of loss occurred by risk and total number facing the risks. For example, 100 motorists may be expected to die out of 1,00,000 every year, the ratio is 1:1000. In this way, they estimate both the average frequency and the average severity of loss based on previous loss experience. Thus, the insurer can predict future losses with a greater degree of accuracy as the number of exposures increases. This concept is important because an insurer must charge a premium that will be adequate for playing all losses and expenses during the policy period. If the risk is high, higher insurance premium is determined.

Payment of Accidental Losses

An accidental loss is one that is unforeseen and unexpected and occurs as a result of chance. It is the second characteristic of insurance. The law of large numbers is based on the assumption that losses are accidental and occur randomly. For example, a person may be hit by a car in the road and break a leg. The loss would be fortuitous. Only such accidental losses are paid in insurance.

2. Risk Transfer

Actually, insurance is a risk transfer business, in which a particular risk of an insured is transferred to the insurer. Risk transfer means that a pure risk is transferred from the insured to the insurer, who typically is in a stronger financial position to pay the loss than the insured. Particularly, the pure risks of individual and organizations that are transferred to insurance company include the risk of premature death, poor health, disability destruction and accidental loss of property and liability lawsuits. Risk transfer is an essential element of insurance.

3. Indemnification

Indemnification is one of the most important characteristics of insurance. Insurance should provide somebody with protection against possible loss, damage or liability. Indemnification means that the insured is restored to the approximate financial position prior to the occurrence of the loss. Thus, the insurer should reimburse after loss occurred by particular risks for premium received from the insured against the risks. For example, if Ram has insured his home against fire with an insurance company, if his home burns in a fire, a fire insurance policy will indemnify him financially. It means the insurance company restores him to his previous position. That is payment of money to reconstruct the home to prior position.

It should also be noted that insurer indemnify the losses from risk only in specific situation. If the loss occurred because of the negligent operation of the owner, the insurance company will not legally be liable to indemnify the losses. However, the insured may be indemnified under some policies such as auto-liability insurance policy, disability-income insurance policy. This will restore at least part of the lost wages.

2.5. Meaning of Premium

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

2.5.1. Types of Premium and Calculating Process

We can find various premiums to pay insurer according to the policy. But the premium is fundamentally of two types: Net premium and gross premium. Net premium is calculated considering mortality and interest rate. Therefore, the rate of death of person and interest directly affect on the premium amount to calculate under net premium method. Similarly, the assumed interest rates the expenses of organization and the mortality rate directly affected calculation of premium under gross premium method. “The net premium is based on the mortality and interest rates where as the gross premium depends upon the mortality rate, the assumed interest rate, and the expenses and the bonus loading.”

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

- Single Premium
- Level Premium

Single Premium

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

Calculation of Net Single Premium

Before calculating the premium amount under single premium, we need to know about it. We have already known about single premium. Single premium is one type’s premium but it may differ under different factors. So, insurer should consider and analyze those factors, this may affect the insurance system and policies. There are certain variable which are to be assumed at a level for calculation and alterations in premium, calculation are made at later stage according to the change in the variables. The following factors are assumed while calculating the net single premium.

- As many policies of the given type are being issued as are the numbers of person.

- Premiums are collected in advance or in the beginning of the period.
- All collections are immediately invested and will remain invested until money is need for the payment of claims.
- The interest or dividend or any return of the invested fund is immediately invested for re-earning.
- Mortality rate will be the same as given in the mortality table and will be uniformly distributed throughout the year.

Only these assumptions may not be adequately practicable, but they are taken for making calculation easy. So, insurer need to consider mentioned above factor while calculating premium under net single premium method. The net single premium is calculated under different policies as follows:

Level Premium

Life insurance is usually, issued on a level premium basis, which means that the same premium is charged through out the life of the contract. So, the level premium is paid periodically in installment. The level premium may be yearly, half-yearly, quarterly and monthly. "The level premium system was once a starting innovation because it was reasoned that due to the rising probability of death with age, it would be impossible to charge a flat premium that would compensate for the rising mortality costs. The first insurance policies were issued for one year only and were renewable at the end of this year at a higher rate, provided that the insured was still in good health. These contracts are still available and are known as yearly renewable policies." (Green, Mark R. and Trieschmann, James S.243.)

Usually, the level premium is suitable for the life insurance policies and for the purpose of limited income able person. So, "the level premium idea is considered one of the most basis advances ever made in the development of life insurance. With this concept, it becomes possible to issue policies for longer and longer period until finally whole life contracts were made a regular part of the business. Actuaries using refined mortality statistics could calculate exactly how much had to be charged during the early years of the contract in order to make up fr the rising mortality costs of the later years.

Level premium is easily converted by the net single premium. Hence, the single premium of a given policy can be easily converted into level premium by establishing ratio between net level premium and net single premium. Because the net single premium is the present value of all claims and the present value of all net level premiums is also equal to the total of present values of all claims. It means the present value of all et level premiums is equal to the net single premium.

2.6. Functions of Insurance

We can discuss the functions of the insurance diving into two divided primary functions and secondary functions which are as follows: (Bhandari, Dilli Raj, (2003).262-265)

2.6.1. Primary Functions

The primary functions of insurance are considered very important. Under this primary function, there are the following types of functions:

i. **To provide certainty**

Insurance provides certainty. Risk is uncertain. It is very difficult to guess that there would be any loss or not, from any risk in the future. If it would be loss, we can't know how much loss, when and how will happen it. The cloud of such uncertainty may create many difficulties to a man. If it is insured, the loss of uncertainty turns into certainty. Any person, making life and non-life insurance and saving from the risk that may happen in future, can create an environment to live always happily. The person or the institution should give some amount as a premium. The insurance company provides indemnity to person for the loss that may be created in future from the event. Thus, insurance performs the great task of turning an uncertainty into certainty.

ii. To provide protection

The primary function of insurance is to provide protection. The insurance in the function of providing certainty also provides the security. The loss from the risk always is uncertain and the man does not know when and how much loss will be suffered. So, the man wants protection for the loss of his own life and property from the peril and the insurance provides protection taking the burden of compensation of the loss that may occur in future. By insurance, men always fell protected against financial loss, the insurance promises to bear the financial liability.

iii. To distribute risk

Another function of insurance is to distribute risk. The insurance distributes the risk to the great community, on the basis of the principle of cooperative; the insurance company distributes in proportion the financial loss of persons insured, to other persons insured whether it is greater loss or little loss, the rule is that it is to be distributed it naturally to all. Thus, the insurance company is always capable to pay such amount of the small or big loss.

2.6.2. Secondary Functions

The secondary functions of insurance are very important which are helping to provide the aliveness to insurance. The secondary functions of insurance are stated below:

i. To prevent loss

The insurance has carried the concept to lessen the loss. This insurance business circulates and extends the means to prevent the loss to the people. To prevent the social loss associating with different organization and institution active in the nation, the insurance works, from which the rate of premium decease. To prevent the possible damage and loss, it should do co-function with health organization, educational organization, fire engine and other such types of institutions and it provides financial assistance to such institutions. From such task, both insured and insurer get benefits.

ii. To improve efficiency

Insurance provides the economic protection against the loss in the death of a person and in the person's property from the risk that may occur in future. In other words, the insurance, bringing the certainty in risks, offers the inspiration to the businessmen. Any person or businessman should not afraid of risk and loss happens in future, he does his business and daily work peacefully and without worries. The people become alert encouraged and active from it. It increases the efficiency for the work from such functions.

iii. To provide capital

Insurance company collects the premium from the persons and organizations and institutions who want to make insurance. In this way, the amount of premium as a fund collects a lot of amount in the insurance company. By investing such amount in different productive sectors, the insurance company can make the source of income. To provide the loan to the needy person and investing in other safe place and providing amount to different persons and institutions, the insurance helps them to do business transaction. In this way, the insurance provides the assistance for making the capital of business..

iv. Decrease in social problem

In modern age, insurance can be used as a means to save the society from the unforeseen risks. The economic burden that may come on the society from the old age, unemployment, industrial accident or other type of events can be lessened with the help of insurance. The insurance may decrease the economic problems that may fall on the individuals from event happened in the society, maintains the liability upon the state.

v. To help in foreign trade

Insurance assists international trade. The international trade among different countries is based on marine, airways and land route. In the course of trade transaction, there may be different risks and uncertainties for the businessmen. But insurance company provides economic protection against such risks. No doubt it increases the foreign trade and adds to the efficiency of business.

vi. To help in economic progress

Insurance helps economic progress, because the insurance companies, by insuring life and property of different persons, are giving a kind of economic assistance to them. Thus, people can work freely. Eventually, the function of insurance is associated to the development of the nations.

2.7. Need of Insurance

Necessity of insurance is today, there is no dispute about it. Because the human life is full of struggle from which man can’t get immune from the risk. It is meaningless to think the life without risk. To express in another word, the risk is existed in every place and time. The risk creates uncertainty. Every person has wish and will to get protection against the risk, which may be created in future. The men get tiredness and suffering in their dealing from the different risks like theft or burglary, destruction of all things from fire. Only one way to get protection such risk is insurance. Insurance is considered an important weapon to get financial protection against uncertain risk. *(Bhandari, 2003:265)*

Insurance is considered necessary in every sector with the motive of obtaining economic compensation for loss suffered from uncertain unforeseen events in trade, industry, agriculture, accident, marriage, education, etc. The insurance business is considered very necessary. The necessity of insurance can be expresses in the following words:

1) Different goods may have to be sold and purchased in trade. There is a possibility of great loss by fire, robbery, etc. The goods are sold on credit by the merchants, with the help of insurance the financial protections can be secured against such type of uncertainty in business.
2) Trade in modern time has become of the international nature, not being limited only to the local trade. There are various types of risks in international trade. Insurance is necessary for the financial protection against the loss that may has been suffered from different risks in international trade.
3) Industrialists producing goods in industry, mills, and factories. The investors should invest a great deal of amount in these organizations. As a result any type of event may occur in the mill and factory, the production may stop and there may be great loss in the profit of the investors or the profit may be less, for the loss caused by an organ any officials (employee) the investors are responsible in the form of compensation. Insurance is necessary to achieve the financial protection against such loss
4) The necessity of life insurance is felt for the old age. It may be the cause for the growing popularity of the life insurance than that of the non-lfe insurance.

5) In this modern age, insurance is necessary to solve the problem of education, marriage and employment of the children.
6) Insurance is necessary to build the capital for the national development and to mitigate the inflation of money.
7) Insurance is a necessity for the merchant, industrialists, people and the government. In addition to it, insurance is necessary to stop the economic hardship that may come in social structure. Therefore, it is needed to build a beautiful society.
8) Insurance is necessary for creating awareness of the people for their economic protection. *(Bhandari, 2003:266-267)*

2.8. Importance of Insurance

Science, technology, transportation, communication and other various types of modern equipment has made the world easier. Today, through the use of various types of modern communications, equipments and means of transportation, this earth has been congested. Today’s world is limited to imagination of the global village; today’s science has succeeded in overcoming the space. All these are the results of the positive aspects of the science and technology but after all these scientific success, the negative aspects too have appeared whether they are man created or divine, these are like: theft, disaster, robbery, fire case, accident, etc. due to these events or risks there is possibility of ruining the properties. All these possible loss are the risk out of the control of man. The insurance business is carried out with the objective of offering financial protection to human being from the loss out of control of human being.

Today, the popularity of insurance business is growing day by day. It is considered a great achievement in the financial world with its purpose of providing the protection to man made progress, not to discourage the man from the fear of possible accident, not to block the progress an developments that are moving ahead, though the small accidents may happen, to let the progressive man always to have progress and to save from the financial crisis of risk. There are the possibilities of accidents in the means of transportation like motor, bus, motorcycle, aero plane, ship, etc. There are possibilities of fire case, loot, robbery and theft. Similarly, goods may ruin or loss while sending from one place to another place, insurance is effected for these possible accidents. *(Bhandari, 2003: 267)*

We can't imagine life without risk. Human environment of today and the risk exists in every sector, place and time. The risk by creating uncertainty and weaken human excitement and alertness, stops development and progress. To solve it, man is always eager and conscious. Yet, the risk can't be prevented from being happened. The result created from the risk, is great loss. As a result, the future generation too gets the suffering and environment of terror and fears arises in business. Only one way of solving it is insurance. If insurance is effected there is no fear of loss is the investment. Because even if loss is suffered insurance provides compensation, so all the industrialists, merchants, can invest without fear and with confidence, they run their business continuously as growing of the industry, commerce and trade, this is a good symbol for the country. People become self-dependent, prosperous and competent.

In this way, from the view the role and importance of the insurance sector, to make and timely reformation in the activities of present insurance companies and to establish it as an economic power by strengthen the capital wise structure of insurance companies. To identify the moral responsibility of all related bodies and authorities new sectors in the insurance markets, and to provide the insurance service in such sector has become an indispensable function. Further more an additional responsibility has been added all related authorities to make the insurance business fair, responsive, healthy, prestigious and disciplined and to make capable, competent, manageable and easily available. *(Bhandari, 2003: 268)*

The importance and benefit of insurance is described as follows:

A. Importance to Individual and Family

Insurance is important for an individual and his family because it gives financial security to him and to his family. It helps the individual and his family in various ways. Because of the insurance the individual and his family can live happily and peacefully. It helps the following ways:

1) To provide security

An insurance company ensures life and property of person. It operates its business with the objective of providing financial security for the life and property against some risk. Payment of insurance amount is made to the person insured if he lives up to the period of insurance if he dies before the period to his wished person (nominee), if there is no wished person, or the wished person is dead, to his dependent family and the life insurance can be effected in many ways, one can make insurance for his children's education and marriage and for other purpose. So, the insured and his family get the financial protection. In the property insurance one can get the compensation of real loss. One can save himself from the suffering of loss of the damaged goods. From insurance a person and his family have a great financial security for his property against of risk that may happen in future. In this way, the insurance provides protection against the risk that may happen to the life and property in future. Hence, there is no doubt that the insurance provides financial security to an individual and family.

2) Peace in mind

A person, through the medium of insurance, can protect himself from the risk likely to happen in future, because it offers financial protection against different types of risk. It maintains a kind of peace in the men's minds. The man does not have to worried does not need to change his working style. He may be immune from different kinds of difficulties such as accidents or vents that are possible to happen in future like fire case, accident, storm, wind, burglary and house breaking. An insurance company affects different kinds of insurance against the risk. So a person obtains peace in his mind from it. This is the most important and necessary element for human being.

3) Encouragement in saving

The element of investment and security exist in life insurance. Insurance provides encouragement to savings. The element of saving exist in life insurance because the amount invested in life insurance is always secured, there is no possibility of loss of invest premium, according as the type of insurance he has effected. An insured or his family gets benefit. There is no controversy about it. We can gain a lot of money by paying a little amount of premium. If a person has affected life insurance he has to pay the premium to the insurance company any way. From it, he develops saving habit.

4) Profitable Investment

There exists an element of investment in life insurance. A person who affects insurance can so effect as either to be involved in profit or not to be involved in profit. If affected to be involved in profit, he will receive profit, the profit of the company in addition to the insured amount. Life insurance secures profit because quantity of investment is high in life insurance. The person too gets in addition to the insured amount, the amount of profit too. So, he may collect a great amount with him by investing that great amount of money in a productive and profitable sector, he can gain a lot of profit.

5) Elimination of dependency

Insurance creates an environment of independency from dependency on others. It is difficult for any person to live depending on other. There is no freedom at all. But the insurance business respects a man’s freedom and teaches a lesson to live with self-respect. Because, if a person who earns dies, and if a valuable property is destroyed the person may have to live on another person’s dependency. But insurance, against such risks, immunes such persons from living dependency on another person.

6) Increase self-respect

Insurance increases a person’s self-respect. The insured should not live under another person’s pressure and flattery. Insurance teaches the lesson of self-help. He can live with full respect in the society. A person’s condition becomes painful when his economic condition deteriorates. Such condition is created by risks that fall in future. But insurance ensures security against all types of risks.

7) Fulfillment of personal needs

A person has a number of needs. These needs are directly related with his financial status. So, his various needs always trouble, household, educational, social and cultural necessities are connected with economic activities. To fulfill these necessities, he can affect insurance.

8) Provides knowledge for protection from risk

Insurance provides technological and specific knowledge about the effective methods to save from the possible risk that may occur in future. The methods are useful for the insured and the person insured himself becomes careful to be safe from the risks.

B. Importance to Business

Insurance is too much more important for a businessman. It is meaningless to imagine a good business without insurance. Insurance offers a high economic relief to different types of industrialists and businessmen. Modern business has flourished due to insurance. From the viewpoint of business, the importance of insurance is as follows:

1) **Protection from uncertain losses**

   Insurance gives protection against uncertain loss. The main function of insurance is to give economic certainty to the business world. Any type of risk is uncertain. Such risk, causes different types of damage and loss to the industry, trade and mill-factory, can ruin the life of a businessman. He may fall to an economic crisis. Not only the business world faces financial crisis but also, it reduces the capacity to run the business again. If such situation is created, it may be misfortune for a nation. But insurance saves businessmen from such risks possible to happen in future.

2) **Increase in efficiency**

   The cloud of worry does not enter into the mind of the investors who invest their amount in business. Insurance gives economic protection against different types of risks that may occur to the business in future. Thy can work in their business, without worries with insurance. They do not move back. They are ready to spend a great amount of wealth, to operate their business. A kind of efficiency develops in investors from it. They, widen the knowledge of the business.

3) **Facility in foreign trade**

   The wideness and popularity that have come to the foreign trade is the contribution of insurance. Insurance has an important contribution to the growth of foreign trade. Insurance has an important contribution to the growth of foreign trade. Insurance has provided encouragement and economic facility to the merchants who operate the trade in foreign land. There is wide growth in the quantity of foreign trade that's why, insurance gives protection to the merchants against risk that may appear, in the course of trade without insurance foreign trade can't get aliveness.

4) Continuation of business

In partnership business, business may have to be dissolved due to any one partner's death. Insurance helps to continue business, if one of the partners dies, the capital of the business may be divided due to the lack of adequate property. But the business may be continued by making insurance. Hence, business can be run under the insurance contract.

5) Basis of credit

Insurance is an important basis of credit. After insurance is affected, the insured can take loan, putting his insurance policy as a security. The person, who gives loan by taking insurance policy as a security, doesn't afraid from losing his money. In case, the debtor dies the insurance company pays loan to the creditor. If the creditor claims, the insurance company is compelled to pay the amount.

6) Welfare of employees

Insurance does the function of welfare of employees. In fact, with the objective of growing morale of employees, the employers' business organizations may provide different type of facilities to employees. They can achieve these objects by affecting the group insurance of all workers and officials to increase the morale of the officials and increases business efficiency. The successfulness and unsuccessfulness of business depends on the welfare of employees.

C. Importance to Society

In addition to the person and business, insurance is important also to the society. In fact, insurance has contributed a lot to the welfare of the society. From the view point of social welfare, the importance of insurance can be described as follows:

1) Economic growth of country

Insurance assists for the economic development of a country. A person can obtain economic protection by effecting insurance of his properties against different risks. In addition to it, the insurance companies play an important role by providing necessary capital for the nation. Insurance helps the welfare aspect of the employees and brings speed to the efficiency of the employees and plays an important role for the development of agriculture and industry. Finally, all these things contribute for the economic development of the country.

2) Reduction in social evils

Insurance helps to reduce social evils and to make the society dynamic and healthy. Various types of risks spread different type of defects. Due to a great loss, a man may commit different types of crimes. But we can protect society by effecting insurance against such type of risks likewise, the helpless children, the disabled people and the unemployed people need not got orphanage due to natural calamity, by the help of production received from the insurance.

3) Reduction in inflation

Insurance reduces the pressure of inflation in a country. It helps to keep financial activities in balance. An insurance company takes premium from a person who wants to make insurance. The quantity of such amount is great. And it invests that collected amount in different sectors. It gains profit from it. Such activity or the function controls the inflation of money. This is an indispensable subject matter for economic balance of a country.

4) Protection of wealth of the society

Insurance helps to make society healthy and beautiful by providing economic protection to the property of a society. By offering dynamism to the society, it stops unhealthy environment in the society. The insurance company, by effecting the life insurance and properties of the people provides financial protection to them. Finally, a man is as an ornament of the society. Hence, the insurance company keeps their property and social environment healthy by making insurance.

5) Helps to maintain living standard

Insurance helps to maintain people's living standard or social status. On the death of the insured his family should not afraid of or relegation to lower living standard. What standard was maintained in earlier years can be maintained by insurance. The insured's family can always live a respect life in a society.

2.9. Insurance Contract

Human society runs on the basis of the duty and liability every member discharges in the society. Under the structure of the modern political system, the liability a person should fulfill is taken seriously. An insurance contract is liability created by the will of the contracting parties. This discharge of the liability, as promised, brings profitability. Due to the presence of consideration, the necessary elements for a contract create a condition in which the parties of that contract get something and lose something. In this way, the thing in which the parties get something and lose something through the contract is called profitability of a contract. Insurance is a contract under which there is one party insurer and another party is the insured. *(Bhandari, 2003: 273)*

Insurance contract is an agreement recognized by law between insurer and insured. The insured pays premium to insurer in this contract. In exchange, the insurance company takes responsibility to give compensation, if any incident takes place in future. In insurance contract, the insurer takes the burden of risk upon the subject matter insured and provides economic security to the insured. In insurance business there is agreement between the insured and the insurer. Without making a contract, we can't imagine insurance business. Insurance contract is a special contract. *(Bhandari, 2003: 274)*

2.9.1. Essential Elements of Insurance Contract

Insurance is a special contract. Generally an agreement enforceable under law is called contract. But all agreements are not contract. So, all contracts are agreements but all agreements are not contract. An agreement must have all essential elements for a contract, which are as follows: *(Bhandari, 2003: 274-277)*

1) **Offer and Acceptance**

   Offer and acceptance are unavoidable necessary elements for insurance contact. Without these elements there can be no insurance contract. A person, institution or organization submits a proposal for his life or his property to the insurance company. After studying and analyzing the proposal, the insurance company should give acceptance. In this way, there must be at least two parties to make an insurance contract. For the purpose of making insurance contract an insurer should give acceptance upon the proposal of insured. In insurance business, one party, called insured should fill up the proposal form, for the insurance of life or property, and should submit it to another party, called the insurer. The insurer if satisfied from proposal form, and necessary information too, and studying the risk, then he can issue the acceptance letter, the first premium and receipt, cover note or policy and grants the consent to it. After all these formalities have been done, it becomes contract.

2) **Free Consent**

Parties entering into a contract should enter into it by their free consent. The consent will be free when it is not caused by- (1) coercion, (2) undue influence, (3) fraud, (4) misrepresentation, or (5) mistake. Where there is no free consent except fraud the contract becomes voidable at the option of the party whose consent was so caused. In case of fraud the contract would be void. Another necessary element to be a contract is free consent. Without free consent, there can't be a contract. Consent received forcefully can't be a free consent. So, for insurance contract, free consent is needed. Without free consent, there is no contract in the eye of law.

3) **Legal Consideration**

Legal consideration is an unavoidable necessary element for an insurance contract. It need not be money only but it must be valuable. It may be sums, right, interest, profit or benefit. It is useless to imagine a contract without legal consideration. The illegal consideration can't get legal validity. So, there must be legal consideration. The legal consideration plays an important role in insurance contract. If the insured has made insurance of his property and if that property is ruined or damaged, the insured possesses the right to get the compensation and also the liability is fixed for to pay the premium. In one side, the compensation is consideration and in another side, the premium is consideration. Hence, the legal consideration is a very important element of a contract.

4) **Competent Party**

To be a contract, the parties of contract should be competent. They should not be disqualified by law. This matter also applies in insurance, because insurance is a contract. To affect insurance contract both the insured and insurer should be competent. If the contract is not made from the competent party, it will not get legal validity. A person under the age of 16, lunatic, bankrupt, etc are not able to make contract. Or the parties who make contract should be competent.

5) **Lawful Object**

For a contract to be valid the object of the agreement should be lawful. An object that is (1) not forbidden by law, or (2) is not immoral, or (3) opposed to public policy, or (4) which does not defeat the provisions of any law, is lawful. The subject matter of a contract should be legal or should not be restricted by law. We can't make a contract for the achievement of the illegal object. We can make contract only for the subject matter permitted by law. A contract can't be made against social welfare. Similarly, we can't make contract to commit crime. The insurance contract too can be done only for the legal object. Therefore, the object of the contract must be legal, not illegal.

6) **Insurable Interest**

Another compulsory and necessary element for insurance contract is insurable interest. It is a kind of gambling to affect insurance upon the insured's property if that there is no insurable interest and such contract becomes illegal. In this way, without insurable interest, there can't be insurance contract. Therefore, there must be an insurable interest of the insured in the goods to be insured.

7) **Utmost Good Faith**

Both the insured and the insurer, from the beginning of the insurance contract to its end, must have utmost good faith in insurance. According to it, the insured should give the actual fact or the information of his subject matter that is proposed for insurance to the insurer. By studying the risk upon the fact given by the insured, the insurer fixes the premium, if it is found later that the insured had concealed such facts to deceive the insurer had shown false statement and hiding the actual or real fact, the insurer keeps the right to cancel the contract. The things, which are stated in the proposal form, should be right and true because the proposal form is the basis of the contract. After submitting the proposal, if there are something changes in a nature in his subject matter or in the time of renewing the insurance, the information of that change should be given to the insurer. And the insurer too should tell the real fact things to the insured. It is not enough to be good faith in insurance contract; it is very necessary to be utmost good faith in it.

8) **Warranties**

In insurance contract certain conditions and promises are called warranties. A warranty is that by which the assured undertakes that some particular thing shall or shall not be done, or that some conditions shall be fulfilled, or whereby he affirms or negates the existence of a particular state of facts. Warranty is a very important condition in insurance contract, which is to be fulfilled by the insured. On breach of warranty, the insurer becomes free from his liability. Therefore, insured must have to fulfill the condition and promises of insurance contract. The contract can continue only when warranties are fulfilled.

2.10. Mandates and Powers of Attorney

Mandate of attorney is very important in the insurance business. We know that the insurance company is liable to make payment for the loss incurred. As soon as the claim is paid, the insurance company has full right over the damaged property for which an authority is necessary from the insured or from his power of attorney, which is known as mandate of attorney.

As mentioned above, the insurance company takes over the damaged property after the payment of the claim. The take over of such assets is usually referred as power of attorney. It is implemented upon the following procedures:

1. Taking over of property.
2. To sell the damage property in scarp value.
3. Sale of assets in different components.
4. Repair and maintenance of the property in usable condition or sale it after repair.
5. Return of the assets to the insured after adjusting its value.
6. Compensation can also be claimed by the insurance company from third party provided such loss was incurred by the third party. *(Vaidya, 2001:192)*

2.11. Secrecy

Secrecy plays a significant role in the insurance business. In this context, both the parties involved in the insurance contract are responsible to extend information as far as possible under utmost good faith. There should not be any activity that will hamper in the operation of the business or should influence in the insurance contract. If either party finds out that there are some information which have been hidden, may lead to the termination of the insurance contract immediately. In such situation, the compensation may arise to the injured party. Therefore, both parties must be aware of the fact that either party should not hide the information which can influence the insurance contract. However, information pertaining to the business of both or not relevant to the insurance contract is not necessary to be disclosed. *(Vaidya, 2001:192-193)*

2.12. Appropriateness of Payment and Set-off

The basic objective of insurance company is to accept the risk for any uncertainty. In case of loss of assets or life, the insurance company is responsible to compensate for such losses within its discretion. The insurance company is supposed to make compensation according to the insurance contract and after full investigation of incident. The determination of loss or compensation is a difficult task for insurance companies.

According to the insurance principle, the insured has to inform the company about the loss of assets of life immediately or it can also be informed through the insurance agent. The insured is given instructions before or at the time of insurance the procedure of making claim. The insured must submit the claim specifying the amount clearly. Some of the insurance companies have adopted their prescribed forms for claims purpose.

As soon as the insurance company receives the claim application, it will start investigation for appropriation of payment. Appropriation of payment is the determination of amount for compensation or the finalization of compensation figure. Generally, the investigator appoints the investigator for claim investigation. Once the investigator finalizes the investigation, an action for payment is enhanced. If the investigator's amount is not matching to the claim amount, then the adjustor is assigned to investigate the same and draw a final amount for amicable solution, i.e., he will draw a final amount which is assumed to be agreeable to both parties. In case if both the parties are not reached to amicable solution, the arbitrator is appointed for the determination of compensation of the loss.

Once the compensation amount is fixed agreeable to both, the final document or proof of loss is prepared which is usually referred as the appropriation of payment and recommended for payment.

The account is set off on the basis of the proof of loss. The insurance company may or may not pay the entire amount in one payment. It depends upon the insurance contract or good faith of the party. Generally, the account is set off in one installment through cheque. All the deductions are made if any, from the appropriation of payment. *(Vaidya, 2001:193-194)*

2.13. Non-Life Insurance

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 risk of insured against some specified cost i.e. the premium. It includes property insurance, liability insurance and other forms of insurance. General insurance considers all the risk and it provided certainty against the risk through certain sum of money. This part of insurance includes the insurance and risk transfer of the property and liability of insured where, "property insurance, against loss arising from the ownership or use of property, included two general classifications. The first indemnifies the insured in the event of loss growing out of damages too, or destruction of, his/her own property, include two general classifications. The first indemnifies the insured in the event of loss growing out of damages too, or destruction of his/her own property. The second form pays damages too, or destruction of, his/her own property. The second form pays damages for which the insured is legally liable, the consequence of negligent acts that result in injuries to other persons or damage to their property. This is known as 'Liability Insurance'. General insurance responsible to payment of an amount to insured. But, when the accident is held by negligence of insured, where the insurer does not responsible to pay any amount against the risk. (Bickelhaupt, *1983:* 80-81).

Insurer and insured may agreed to accept every kind of risk under their contract and the risk transfer through the assurance. But the "coverage written by the property and liability insurance insurers may be divided into five types, physical damage or loss, loss of income and extra expenses resulting from physical damage to property, liability, health and surety. (Mehr, *1986:* 11)

We classified the insurance in life insurance and non-life insurance. These have been mentioned above detail. In practice the insurers provided various types of non-life insurance policies, which are shown as follows at practically.

2.13.1. Marine Insurance Policy

The marine insurance is the oldest form of modern insurance. The modern insurance developed from marine insurance. The marine insurance policy will be written to provide the security against peril, of sea. An essential part of that security is protection against loss or damage by peril of the sea or through the hazards of transit generally. Usually, such policy will provide the assurance/insurance not only against the natural disaster, but also against piracy and other manmade disaster. Further the modified marine insurance policy provides the protection against various risks, which does not belong to sea. The marine 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. Marine insurance provides separate policy in whole risk of adjusted in sea. In practice we can see following insurance policy under marine insurance:

- Ship insurance
- Cargo insurance
- Freight insurance

2.13.2. Fire Insurance Policy

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 the fire. “Basic form of fire insurance offers protection to the insured against the destruction of physical property as a result of fire.” There may be various caused to an extent an accident by fire, Insurer only responsible to provide the indemnity against the risk, which was held at accordance to policy. The field of fire insurance can be modified or extended to include a number of peril closely allied to fire like wind, storm, earthquake, riot and strike, damage, terrorism, explosion, landslide or else. Insurer may change higher premium as per the nature of risk and insurance policy.(Welshman, &Melcher: 213).

2.13.3. Aviation Insurance Policy

Aviation insurance is related with the risk occurring due to the 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 an aircraft. Aviation insurance acquires the risk of passenger, cargo, hull (plane), also. Despite the heavy charges all sends considerable quantities of goods and there is a demand for insurance, more particularly because such goods are usually of small bulk and high value. Thus, the aviation insurance is essential and important in aviation field. Aviation insurance covers the hull insurance, aircraft liability insurance and medical payments, etc.

2.13.4. Automobile Insurance Policy

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

2.13.5. Engineering Insurance Policy

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

2.13.6. Boiler Insurance Policy

Usually, all the big and small industry has installed the boiler machine to produce steam power. Where the boilers are used, there will always be the possibilities of explosion or breakdown. Therefore, the boiler owner wants to get protected of such types of risk. However, engineering insurance protects against the risk occurring due to the explosion or damage of industrial boiler. If the heating boiler is explosion, in such explosion the person may get injured or the property may be destroyed. At that condition boiler insurance provides the protection against the all risks of boiler.

2.13.7. Contractors all Risk Insurance Policy

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 occurs heavy loss on contact, upon which they are working.

2.13.8. Machinery all Insurer Risk Insurance Policy

Under this insurance an insured assurance his/her machinery against the risk of break down and failed future when the machine is broken-down at that situation he/she 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 direct and indirect cost like repairing cost, cost of the ideal workers or similar loss.

2.13.9. Miscellaneous Insurance Policy

“A number of coverage’s written by ‘casualty insurers’ are available that can not be classified neatly as liability, auto or crime insurance but nevertheless are important to those with the exposure that these forms are designed to protect. They are discussed under the innocuous heading of ‘miscellaneous coverage’ and are written by property and liability insurance.” Miscellaneous insurance policy covers the vague of insurance policy. However, these are the practically important policy practice by the insurers. (Maher, **1974:**44)

2.13.9.1. Burglary Insurance Policy

The burglary insurance provides the certainty against the case of criminal nature. Under this policy the insured gets financial assurance against the losses by theft, burglary and house breaking. Thus, the burglary insurance covers the house and house breaking, theft, burglary and other criminal natures of insurance.

2.13.9.2. Money-in-transit Insurance Policy

This type of policies is generally required for bank and financial institutions that involve in the functions of receiving and sending cash from one place to another. If the cash is lost during transit period then the policy of money- in -transit insurance provides the indemnity to the insured.

2.13.9.3. Personal Accident Insurance Policy

Under this policy the insured gets the financial assurance against being handicapped from any accidents. This policy may be written for the temporary disabilities, for permanent disabilities, or for comprehensively all disabilities, too. Under this policy the payment of the insurance amount will be up to the limit prescribed for each level of disabilities like 50% of insured amount for the damage of one leg or hand, etc.

2.13.9.4. Household Insurance 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 vandalism; riot is financially protected from the insurer if this insurance policy is written.

2.13.9.5. Medical Insurance Policy

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

2.13.9.6. Fidelity Guarantee Insurance Policy

The world stays at the faith. But 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 bond for protection." (Welshman, & Melcher, :214).

2.13.9.7. Workmen's Compensation and Employers Liability Insurance Policy

This insurance is a means of motivation to the worker because a firm/organization gives the 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 employers' 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 employer's liability insurance assumes the expenses of compensation and provide for medical, surgical and hospitalization requirements as determined by the compensation laws of the state."

2.14. Matching Risk and Return

Risk is defined as the possibility of suffering some form of loss or damage. It is chance of unfavorable event. Insurance companies are ready to accept the risk of the individual. The important function of insurance companies is to diversify the risk over a large number of persons who have agreed to co-operate each other at the time of loss. Hence, insurance companies accept risk from parties who wish to avert risk by transferring it to the insurance companies. The party seeking to transfer the risk pays an insurance premium to the insurance company as compensation to match risk with protection.

Insurance companies have used funds to construct the well-diversified portfolios. Basically, much of their investment in corporate bond, government securities, common stocks and loans and then the risk of the portfolio are significantly lower. To formalize these ideas, we use the concepts of risk and return introduced. *(Shrestha* and *Bhandari*, *2007:390)*

Expected Net Revenue

Expected net revenue is the average value or mean value of a distribution of funds. Suppose, probability p denotes that a given policy holder will live the entire year. Hence, the probability of dying during the year for a policy holder is considered to be (1-p). The insurance company must pay the benefit of amount L if the policyholder dies and R is annual premium to be paid by the policy holder. Given the above assumptions, the expected net revenue of individual policies is found by using the following expression:(Shrestha 2007:390.)

Expected net Revenue per Policy= Annual Premium per Policy - Policy Amount × Probability Rate of Dying

It can be expressed in symbols as follows:

E(Net Revenue/Policy)=R-L(1-p)

If there is n as the number of policies, the total expected net revenue can be calculated as follows:

Expected Total Revenue from Policies = Expected Net Revenue per Policy × Total Number of Policies

E(Net Revenue/Policy)=n[R-L(1-p)]

Standard Deviation

Risk can be better measured by dispersion. The most appropriate measures of risk are the variance of the probability distribution of returns and the standard deviation i.e. a related risk concept. σ_1 measures the single life insurance policy risk and nL denotes total amount of single policy from individual risk with the with a root over of the probability of dying and not dying.(Shrestha, 2007:.390-391).

Standard deviation, σ_n measures the life portfolio risk. We can explain by a given formula. Suppose, the large single policy that denotes n× L amount would generate a net revenue of n×R amounts with probability p, or in consequence there is a net loss of n(R-L) amounts with probability (1-p). The standard deviation for single life insurance policy can be calculated as follow:

$$\sigma_1 = nL\sqrt{p(1-p)}$$

The standard deviation of total life insurance policies is the root over of standard deviation of life insurance policy multiplied by the number of the insulate policies. The standard deviation of total life insurance policies can be calculated as followed:

$$\sigma_n = L\sqrt{np(1-p)}$$

Fire insurance policy

Definition

Standard fire policy that usually covers fire due to any cause subject to some exceptions which too may be covered with additional premium. These policies may be extended further (by paying additional premium) to include collateral damages or losses such as loss of income. (www.businessdictionary.com)

Dave Paterson, a fire insurance expert and 30 year veteran in the insurance industry told us what he thought was important. “Probably the most important thing is to make sure that the limit on the dwelling coverage is sufficient to actually replace the home. There's big litigation going on in this area right now on underinsurance. Many, many, many times the insurance industry sets the limit for the dwelling. Say it's $100,000, but the actual repair cost that you find out after the loss occurred is $180,000, so right away, the insured has lost $80,000 simply because it relied upon the insurance company to set the policy limit for the dwelling. That policy limit controls other coverage. It controls the amount of personal property coverage. Usually, it's a percentage of the dwelling policy limit. (http://law.freeadvice.com/insurance_law/insurance_law/fire-insurance-what-to-look-for.htm)

A fire insurance policy involves an insurance company agreeing to pay a certain amount equivalent to the estimated loss caused by fire to the insured, within the time specified in the contract. The indemnity is subject to change depending upon the policy. One should confirm with the insurer about the types of risks covered, since one cannot insure the property against all types of risks of fire.

What is the extent of coverage under a Fire Insurance Policy?

Fire insurance provides protection for the estimated value of the physical house. However, there are a number of exclusions to the same, for example medical bills, loss of human life and pets, loss of personal belongings, structures outside the property (including garages and gazebos), damage to the landscape and expenses for accommodation for the time being. These things can be covered under a package of extended property insurance.

What are the main types of Fire Insurance policies?

- **Specific Policy**: The insurer is liable to pay a set amount lesser than the property's real value. In this policy, the property's actual value is not considered to determine the indemnity. The average clause, which requires the insured to bear the loss to some extent, does not play a role in this policy. In case the insurer inserts the clause, the policy will be known as an average policy.

- **Comprehensive policy**: This all-in-one policy indemnifies for loss arising out of fire, burglary, theft and third party risks. The policyholder may also get paid for the loss of profits incurred due to fire till the time the business remains shut.

- **Valued policy**: This policy is a departure from the standard contract of indemnity. The amount of indemnity is fixed and the actual loss is not taken into consideration.

- **Floating policy**: This policy is subject to the 'average clause'. The extent of coverage expands to different properties belonging to the policyholder under the same contract and one premium. The policy may also provide protection to goods kept at two different stores.

- **Replacement or Re-instatement policy**: This policy is subject to the re-instatement clause, which requires the insurance company to pay for replacing the damaged property. So, instead of giving out cash, the insurer can re-instate the property as an alternative option.

Why does one need Fire Insurance?

Fire insurance is important because a disaster can occur at any time. There could be many factors behind a fire, for example arson, natural elements, faulty wiring, etc. Some facts that stress the importance of fire insurance include:

- Fire contributes to the maximum number of deaths occurring in America due to natural disasters.
- Eight out of ten fire deaths take place at home.

- A residential fire takes place after every 77 seconds.
- The major reason for a residential fire is unattended cooking.

(www.economywatch.com)

2.15. Review of the Past Studies

Thapa *(2002)*, in his study ***Insurance Industry in Nepal- a Comparative Study on Premium Collection and Investment Pattern*** took the sample of 5 insurance companies namely; Nepal Insurance Company, NICL, UIC(N)L, Sagarmatha Insurance Company Ltd. and AICL. He has done the study based on both the primary and secondary data. The primary data has been collected with the help of questionnaire. He has analyzed the data from F/Y 2053/54 to F/Y 2057/58. He found that the premium collection of the insurance companies has been fluctuating trend. The ratio of premium collection was higher in the fire insurance and lower in engineering policy. He found the high degree of positive correlation between premium and investment of the insurance industry. Similarly, he found positive relation between premium collection and claim paid investment and net profit of sample industry. He found homogeneity on the claim paid of the sample companies. He recommended for the diversification of investment portfolio, proper training to agents and new policies and attractive strategy should be developed.

Shrestha *(2002)*, in his study ***A Study on Premium Collection and Investment Position of National Life and General Insurance Company Limited*** has done the financial or ratio analysis of National Life and General Insurance Company Limited from F/Y 1994/95 to F/Y 2000/01. He found the premium collection of the total life insurance has increasing and renewal life premium was seen fluctuating. The premium collection from fire insurance was not so much fluctuate, from marine insurance policy the contribution was very least, miscellaneous premium has seen slightly fluctuate. The investment by the company was seen highly diversified. The claim payment for general as well as life insurance policy was seen highly fluctuate. He recommended for issue of new types of policies and diversifies its investments, timely claim payment, and increase the efficiency of staffs.

Dhakal*(2007)* in his article ***Beema Sansthan Punarbeema Suru Garnaya Tayaarima*** stated that after the starting of the reinsurance business in Nepal only, the insurance business of Nepal can expand in the worldwide network. He added that there is a need of huge sum of fund for staring the reinsurance business in Nepal which feasible only through the joint venture business with the foreign reinsurance companies. He also stated that there is a need of large number of qualified technical manpower and technology for starting the reinsurance business within the country.

Shrestha *(2008)* in his study ***A Premium Collection and Investment Position of National Life and General Insurance Company Ltd.*** studied on the premium collection of National Life and General Insurance Company Ltd for F/Y 2057/58 to F/Y 2061/62. He found the collection of premium very fluctuating during this period. The company had maintained satisfactory return on its investment. He also found that the highly preferred investment areas for insurance companies were fixed deposits followed by government saving bonds, corporate securities, finance fixed deposits, policy loans, staff loans and non-government security bonds. He recommended for timely settlement of claims and should increase the efficiency of employees.

Chlise *(2008)* in his article ***Insurance companies to be more transparent*** stated that at present, the insurance companies submit their reports yearly to the board but do not need to publish that in the newspaper. Insurance companies third in place after banking and finance sector in term of trading have not any compulsion as financial institutions to publish their reports in the newspaper but just to submit yearly to the board. He added for buying shares of insurance companies is a more secure venture than any other companies as the insurance business itself is a secure one. Insurance is a tool of the financial sector that guarantees an insurer of their future. He found at present, less than 5% of the total Nepali populace is reaping the benefits of insurance. Even properties holding of national importance are not insured. He found the life insurance sector's contribution to the GDP is only 2% and it generated around 20,000 direct and indirect jobs.

Himalayan News Service-The Himalayan Times *(2008)* in the article ***Insurance business remains stunted,*** has stated that the business of life and non-life insurance in Nepal is yet to advance, due primarily to a lack of awareness among people despite it being an essential part of life for most people across globe.

The study said, the growth rate of Nepali insurance market, life and non-life, is calculated at 30.05% in the F/Y 2004-05, as per the report prepared by the Insurance Board, a regulatory body of the insurant companies. However, the growth rate of life-insurance market stands at 40.02% more than the growth rate of non-life insurance of 21.28% during the same period.

The article presented that if a vehicle hits a person in the street and injuring or killing that person, IB has laid down a compensation to be paid by insurance companies of Rs. 25,000 to 1,25,000 as per the new directives. However, awareness among vehicle owners is yet to be increased for motor insurance, according to experts. Similarly, as per the new directives on motor insurance, compensation provisions have been made for transportation laborers. In case of death after being hit by an insured vehicle, the insurance company has to pay over 100,000 for different purposes, as per the new provision.

Adhikari *(2009)* in his article ***Saabai Nirjeevan Beema Aakai Companyma*** stated that after bringing the provision of the compulsory of the third party insurance in the motor insurance, all the motor insurance should be done through a single insurance company as per the directive of Insurance Board. He stated that this compulsion on third party insurance has increased the amount of the premium payment. But as the third party policy is taken, it covers all the various policies at once in a motor insurance policy which directly reduced the cost on the motor insurance fee. The third party policy value has increased from Rs.3 lakh to Rs.5 lakh. The provision of insurance of Rs.1 lakh from Rs.50,000 for passengers and for driver and conductor from Rs.1.5 lakh to Rs.5 lakh and separate provisions for treatments and disabled has been made in new directives.

2.12 Review of Thesis

Study on Insurance Industry in Nepal- a comparative study on premium collection and investment pattern, done by Thapa (2002). He took 5 insurance companies. He has analyzed the data from F/Y 2053/2053 to 2057/2058. The ratio of premium collection was higher in fire insurance than engineering insurance. He found the high degree of positive correlation between premium and investment of insurance industries. He recommended for the diversification of investment portfolio, proper training to agents and new policies and attractive strategies should be developed.

A study on premium collection and investment position of national life and general insurance company limited. Thesis done by shrestha 2002, he has done the financial or ratio analysis of national life and general insurance companies from fiscal year 1994/95 to FY 2000/2001. He found the premium collection of total life insurance has increasing and renewal life premium was seen fluctuating. The premium collection on fire insurance was not so much fluctuating. He recommended for issue of new type of policy and diversifies its investment, timely claim payment and increase the efficiency of staff.

Thesis done by shrestha 2008, he had studied on FY 2057/58 to FY 2061/62 . During the period of collection of premium is very fluctuating. Nevertheless, the company had maintains satisfactory return on its investment. He recommended for timely settlement of claims and should increase the efficiency of employee.

"Beema Sansthan punar bema suru garnaya tayaarima" by dhakal 2007. According to him after starting reinsurance business in nepal, the insurance business can be expanded worldwide network. He added that for starting the reinsurance business in Nepal two major facts should be followed.

a) a huge sum of fund is needed, it is feasible only through the joint venture business with the foreign reinsurance companies.

b) a large number of qualified technical man power and technology.

According to the article published on national daily newspaper, The Himalayan Times 2008, insurance business remains stunted. The main cause is lack of awareness among people, the business of life and non-life insurance in Nepal is yet to advance. The growth rate of life insurance stands at 40.02% and non- life insurance market stands at 21.28% in FY 2004/05 as per the report prepared by Insurance board.

Chapter –Three

Research Methodology

This chapter presents the short outline of the methods applied in the process of analyzing the premium collection and claim position of the insurance companies. So, it incorporates research designed, population and sample, sources of data and methods of data analysis.

3.1. Research Design

For the analysis of the premium collection and claim payment of selected Insurance companies, analytical as well as descriptive designs are applied. So, research designed for this study is analytical cum descriptive.

3.2. Population and Sample

Population

All the 26 insurance companies operating in Nepal from the permission of Insurance Board of Nepal and Government of Nepal are considered as the population for the research.

Sample

The sample used in this research is purposive in nature. There are 9 life insurance companies, 16 non-life insurance companies and 1 handling both types of insurances. Thus, five non- life Insurance companies' cover 19.23% of the population as sample $\frac{5}{26} | 100$. They are:

Table No.3.1.

Population and Sample ICs for the Study

Population	**Sample**
Nepal Insurance Company Ltd.	Alliance insurance Company Ltd.
National Life Insurance Company Ltd	Everest Insurance Company Ltd.
United Insurance Company (Nepal) Ltd	United Insurance Company(Nepal) Ltd.
Shikhar Insurance Company Ltd.	Himalayan General Insurance Company Ltd.
Siddhartha Insurance Ltd.	Neco Insurance Company Ltd.
Alliance Insurance Company Ltd.	
Everest Insurance Company Ltd.	
United Insurance Company Ltd.	
Himalayan General Insurance Company Ltd.	
Neco Insurance Company Ltd.	
Lumbini General Insurance Company Ltd.	
NB Insurance Company Ltd.	
Rastriya Beema Sansthan	
Nepal Life Insurance Company Ltd.	
Life Insurance Company Nepal	
Sagarmatha Insurance Company Ltd	
The Oriental Insurance Company Ltd.	
Premier Insurance Company Ltd.	
National Insurance Company Ltd.	
Prudential Insurance Company Ltd.	
American Life Insurance Company Nepal	
NLG Insurance Company Ltd.	
Asian Life Insurance Company Ltd.	
Prime Life Insurance Company Ltd.	
Gurans Life Insurance Company Ltd.	

3.3. Sources of Data

This research is based on secondary data. Required data is collected from published financial statements of the insurance companies operating in Nepal. The basic sources of data used are as follows:

a. Annual Reports.
b. Published materials from concerned insurance companies.
c. Financial statements of concerned insurance companies.
d. Related books and journals.
e. Official websites of the sample insurance companies.

3.4. Methods of Data Analysis

Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used. Among them ratio analysis and test of hypothesis regarded as major one, used in this research.

3.5. Tools Used

The following tools are used in the process of study of the premium collection and claim payment of the insurance companies:

Total Premium collection to Total Premium collection from respective Insurance Policies Ratio

It is a simple ratio calculated by dividing the total premium collection in a respective polices by the total premium collection amount.

Total Claim paid to Total Claim paid to respective Insurance Policies Ratio

It is a ratio calculated by dividing the total claim paid in a respective polices by the total claim paid amount.

Total Profit to Total Profit from respective Insurance Policies Ratio

It is a simple ratio calculated by dividing the total profit in a respective polices by the total profit amount.

3.6 Arithmetic Mean (A.M)

The mean is the figure we get when the total of all the values in a distribution is divided by the number of values in the distribution. The arithmetic mean is also known as the average. It should, however, be remembered that the mean can only be calculated for numerical data. The mean is an appropriate term than saying average. The mean of data is biased toward extreme values. The mean is suitable when the scores are distributed symmetrically about the center of the distribution. This is calculated by using following formulae:

$$\text{Mean } (A.M.) = \overline{X} = \frac{X}{n}$$

3.7 Standard Deviation (S.D.)

The measurement of the scatter ness of the mass of figure in a series about an average is known as the dispersion. The standard deviation measures the absolute dispersion. The greater amount of dispersion, greater the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series: a large standard deviation means just the opposite. This is calculated as follows:

$$\text{Standard deviation } (S.D.) = \sqrt{\frac{(X - \overline{X})}{n}}$$

3.8 Coefficient of Variation (CV)

The coefficient of variance is the relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percent. It is calculates as follows:

$$\text{Coefficient of Variation } (CV) = \frac{S.D.}{Mean} \times 100$$

Lesser the CV, better, the performance and vice-versa and so on.

3.9 F-test

The analysis of variance frequently referred to by the contraction, ANOVA is a statistical technique especially designed to test whether the means of more than two quantitative populations are equal. It is applied to find out whether the two samples may be regarded as drawn form the normal populations having the same variance. The value of "F" is calculated as:

$$\ldots F \ \mathrm{X} \frac{Larger\ \ estimate\ \ of\ \ variance}{Smaller\ \ estimate\ \ of\ \ variance}$$

The calculated value of "F" is compared with the table value for V_1 and V_2 at 5% or 1% level of significance.

3.10 Research Gap

The research regarding the insurance companies was seen relatively limited to the certain topics only. Most of the past researchers have done the financial analysis of the insurance companies under their research work. The past work has been limited on the analysis of the investment done and the premium collection by any one insurance company of the country. The following research is different form the earlier research on following basis:

i. The research has covered on the premium collected as well as the claim paid on each insurance policies handled by the companies.
ii. The research has also deeply studied on the claim payment made by the respective companies for each and every policy.
iii. The research has studied ton the profitability from the every non-insurance policies handled by the companies.

Chapter – Four

Presentation and Analysis of Data

This part of the study deal with the premium collection, claim payment and profitably occurred on the respective polices of each sample insurance companies.

4.1. Premium Collection

4.1.1. Premium Collection on FI to TPC

The sample insurance companies (ICs) have collected premium on fire insurance (FI) which has been analyzed below:

Table No. 4.1

Premium Collection on FI to TPC

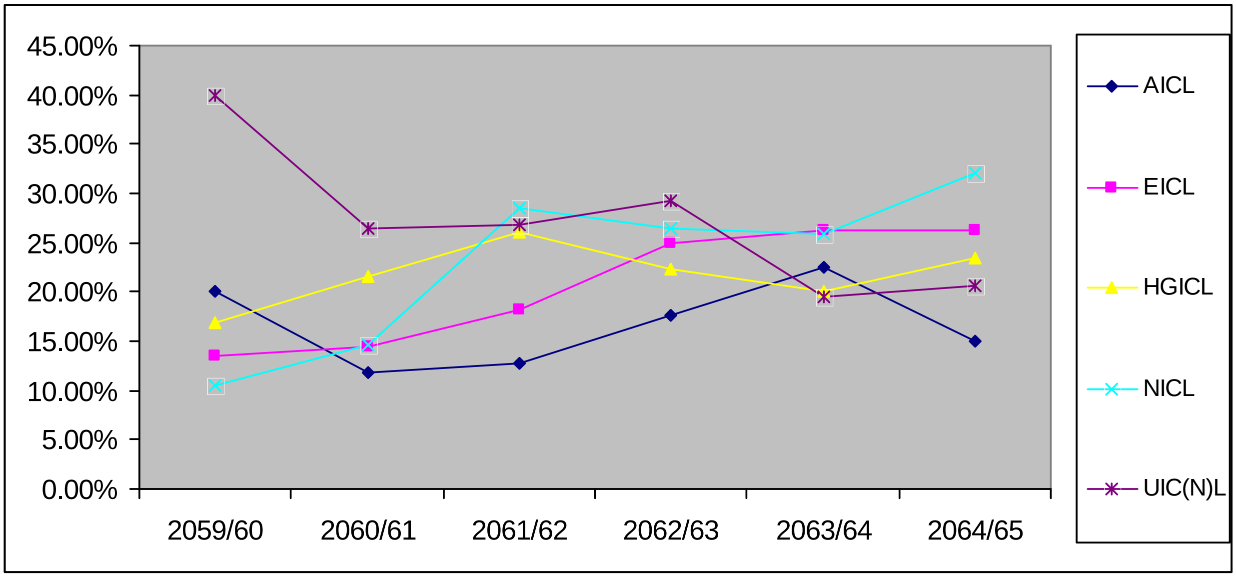
F/Y	AICL	EICL	HGICL	NICL	UIC(N)L
2059/60	19.99%	13.41%	16.87%	10.50%	39.93%
2060/61	11.77%	14.36%	21.51%	14.56%	26.52%
2061/62	12.75%	18.14%	26.04%	28.43%	26.75%
2062/63	17.56%	24.98%	22.27%	26.46%	29.30%
2063/64	22.52%	26.18%	20.00%	25.94%	19.44%
2064/65	14.99%	26.20%	23.39%	32.07%	20.57%
Average	**16.60%**	**20.55%**	**21.68%**	**22.99%**	**27.09%**
S.D.	**4.20**	**5.97**	**3.01**	**8.48**	**7.36**
C.V.	**25.30%**	**29.05%**	**13.88%**	**36.89%**	**27.17%**

Source: See Annex-I

The premium collection on FI for AICL lies between 10%-23% whereas, for UIC(N)L lies between 19%-40%. Similarly, for EICL, HGICL and NICL it lays in the range of 13%-27%, 16%-27% and 10%-33% respectively.

Figure No.4.1

Premium Collection on FI to TPC



The premium collection on FI by HGICL is seen more consistent than the other sample ICs as its CV is seen the least among the others. Its CV was seen only 13.88% whereas the highest CV was of NICL with 36.89%. The premium collection from FI was seen more consistent of AICL also than the EICL and UIC(N)L as well. The highest average premium collection from FI on TPC was seen of UIC(N)L with 27.09%. Similarly the ratio of contribution to TPC from FI was AICL is 16.60% in average.

4.2. Claim Payment

4.2.1. Claim Payment on FI to TCP

The sample ICs have made the claim payment on FI as follows:

Table No. 4.2

Claim Payment on FI to TCP

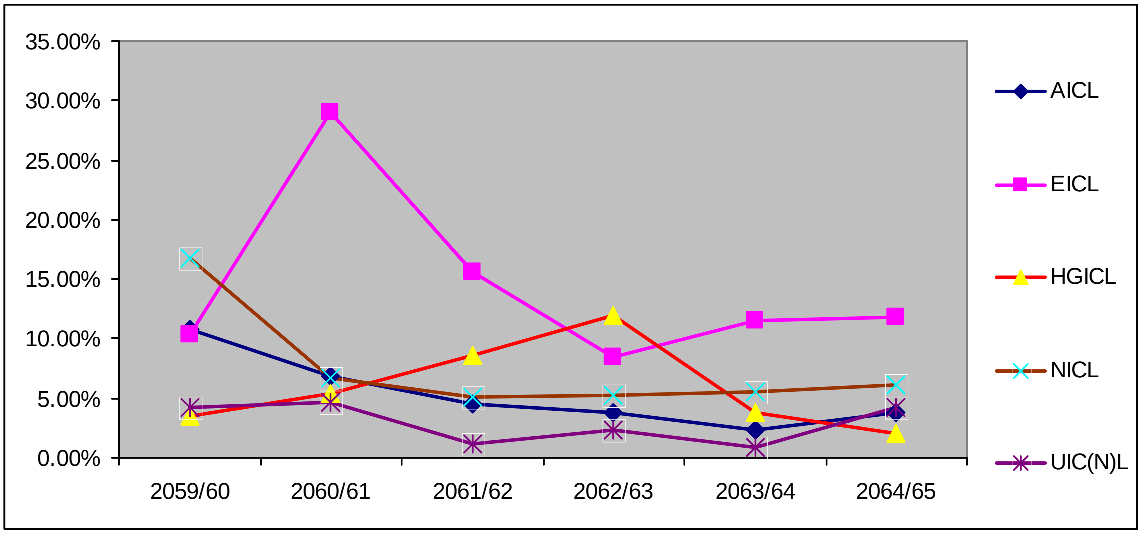
F/Y	AICL	EICL	HGICL	NICL	UIC(N)L
2059/60	10.73%	10.38%	3.53%	16.70%	4.23%
2060/61	6.81%	28.96%	5.42%	6.64%	4.66%
2061/62	4.51%	15.67%	8.66%	5.05%	1.21%
2062/63	3.78%	8.43%	11.99%	5.23%	2.33%
2063/64	2.30%	11.59%	3.82%	5.51%	0.90%
2064/65	3.78%	11.77%	2.10%	6.11%	4.24%
Average	**5.32%**	**14.47%**	**5.92%**	**7.54%**	**2.93%**
S.D.	**3.03**	**7.49**	**3.72**	**4.53**	**1.66**
C.V.	**56.95%**	**51.76%**	**62.84%**	**60.08%**	**56.66%**

Source: See Annex-II

The claim payment made by NICL remained around 5% to 6% during F/Y 2058/59 to F/y 2063/64. The claim payment on F/Y 2058/59 was seen higher for the entire sample ICS except HGICL. Similarly, it was seen higher in F/Y 2059/60 for EICL than other F/Y with 28.96%. The least claimant on FI was seen for UIC(N)L in the F/Y 2062/63 with 0.90%. Comparatively, the claim made on FI was seen lesser than other sample ICs of UIC(N)L.

Figure No.4.1

Claim Payment on FI to TCP



The claim payment for the FI on TCP among the sample ICs was seen lowest of the UIC (N) L with the average of 2.93%. The highest average ratio of the claim paid for FI on TCP was seen of EICL with the average of 14.47%. The most consistent on the claim payment on FI among the sample ICs was seen of the EICL with the least CV of 51.76% and similarly the most inconsistent of the claim payment on the FI was of the HGICL with the highest CV of 62.84%.

4.3 Test of Hypothesis

This part of study includes test of hypothesis to see whether the insurance companies seem homogeneous in terms of premium collection, claim payment, relationship between collection and payment, etc.

4.3.1. Test on Homogeneity in the Premium Collection of the Sample Insurance Companies.

To make test of hypothesis the following hypotheses are formed:

Null Hypothesis (H_0): There is no homogeneity in the premium collection of the sample insurance companies.

Alternative Hypothesis (H_1): There is homogeneity in the premium collection of the sample insurance companies.

Table No.:4.3

One-way ANOVA Table for Premium Collection of Sample ICs

Source of Variation	**Sum of Square**	**d.f.**	**Mean Square**	**F ratio=** $\frac{MSC}{MSE}$
Between samples	SSC=7.4073	k-1= 5-1=4	MSC= $\frac{7.4073}{4}$ =1.851825	F= $\frac{MSC}{MSE}$ = $\frac{1.851825}{0.135116}$
Within samples(Error)	SSE=3.3779	n-k= 30-5=25	MSE= $\frac{3.3779}{25}$ =0.155116	
Total	**TSS=10.7852**	**n-1=29**		**F=13.71**

Source: See AnnexIII

Critical Value: The tabulated value of F at 5% level of significance for 4 and 25 d.f. is 2.76.

Decision: Since, the calculated value of "F" is greater than the tabulated value of "F", the alternative hypothesis, H_1 is accepted and null hypothesis, H_0 is rejected. Hence, there is homogeneity in the premium collection of the sample insurance companies.

4.3.2 Test on Homogeneity in the Claim Paid of the Sample Insurance Companies:

To make test of hypothesis the following hypotheses are formed:

Null Hypothesis (H_0): There is no homogeneity in the claim paid of the sample insurance companies.

Alternative Hypothesis (H_1): There is homogeneity in the claim paid of the sample insurance companies.

Table No.:4.4

One-way ANOVA Table for Claim Paid of Sample ICs

Source of Variation	**Sum of Square**	**d.f.**	**Mean Square**	**F ratio=** $\frac{MSC}{MSE}$
Between samples	SSC= 0.889	k-1= 5-1=4	MSC=$\frac{0.889}{4}$ =0.22225	F=$\frac{MSC}{MSE}$ = $\frac{0.22225}{Z0.030824}$
Within samples(Error)	SSE= -0.7706	n-k= 30-5=25	MSE=$\frac{Z0.7706}{25}$ =-0.030824	
Total	**TSS=0.1184**	**n-1=29**		**$\lvert F \rvert$=7.21**

Source: See Annex-IV

Decision: Since, the calculated value of "F" is greater than the tabulated value of "F", the alternative hypothesis, H_1 is accepted and null hypothesis, H_0 is rejected. Hence, there is homogeneity in the claim paid of the sample insurance companies.

4.4. Major Findings

1. The premium collection on FI by HGICL is seen more consistent than the other sample ICs. The highest average premium collection from FI on TPC was seen of UIC (N)L. Similarly the ratio of contribution to TPC from FI was AICL.

2. The claim payment for the FI on TCP among the sample ICs was seen lowest of the UIC (N)L. The highest average ratio of the claim paid for FI on TCP was seen of EICL. The most consistent on the claim payment on FI among the sample ICs.

3. There is homogeneity in the premium collection of the sample insurance companies.

4. There is homogeneity in the claim paid of the sample insurance companies.

Chapter- Five

Summary, Conclusions and Recommendations

5.1. Summary

Insurance is related with risk. It is better to understand the meaning of risk before we define insurance. Risk is the main source of loss and insurance is the mechanism of covering such losses. Risk is defined as uncertainty as to loss, poses a problem to individuals in every walk of life. On the contrary, when there is uncertainty about the occurrence of a cost or loss that risk becomes an important problem to people.

Some people are risk averse while some are not. The probability of occurrence of such loss is equally likely. It is therefore, risk adverse people are interested to cover such loss through certain mechanism. The easiest way of handling risk is insurance.

Insurance is one of the major risk handling methods. Insurance has grown rapidly and constitutes a major and economic force. Insurance is an instrument to spread the loss caused by a particular risk over a number of persons or distribution of risk among various people who are interested to accept risk for certain return. Basically, the objective of insurance is to spread to loss exposure or to co-operate the risk holders in covering losses in case of occurrence. The terminology used for taking risk or assuring to cover loss is known as insurance.

There are mainly the two types of insurances policies. They are namely: life insurance policies and non-life insurance policies. Life insurance is a method by which a group of people may co-operate to ease the loss resulting from the premature death of members of the group. In general, life insurance is the contract under which the insurer undertakes the responsibility to pay a certain sum of money either on the death of the insured or on the expiry of fixed period in consideration of premium. The non-life insurance policies are significant in the economic activities of the country and in the course of business as this policy protect from the uncertain heavy losses that may take place in the future or uncertain time.

The major activity of any insurance company is to collect the money from the insured as premium and at the time of loss, the company has to pay the claim to the insured client. Thus, the main profit or return for any operating insurance company is the difference between the premium collected and the claim paid by them. The performance of any ICs depends on the management efficiency as well as how it is handling the each and every insurance policy it had issued.

5.2. Conclusions

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 risk of insured against some specified cost i.e. the premium. It includes property insurance, liability insurance and other forms of insurance. General insurance considers all the risk and it provided certainty against the risk through certain sum of money.

After the adoption of liberal market policies in 1990, insurance market’s business has taken off and some private players got into the insurance business. However, industry players commented that there is a limited market for insurance business in Nepal. There are currently 26 insurance companies operating within Nepal from the permission of Insurance Board of Nepal and Government of Nepal. There are 9 life insurance companies, 16 non-life insurance companies and 1 handling both types of insurances. Thus, five non- life Insurance companies have been taken for study purpose.

The premium collection and the claim payment are the major activities of the insurance companies. The large sum of money is collected by the insurance companies from the premium collection from the insured. These premiums are then invested on the various sectors for the good amount of return to the company. Similarly, the company has the responsibility to make the calm payment to the insured client in case of certain accidents or for the case that has been conditioned for the claim payment. The insurance companies make the profit from the insurance business from the amount of difference between the premium collection and the claim payment as well as the return from the investment made by them.

Under the non-life insurance business, Nepalese insurance companies handles mainly on fire, marine, aviation, motor, engineering and construction, and others. The premium collection from the various types of the non-life insurance business for the sample ICs was seen in the good position. But the claim payment for the

5.3. Recommendations

1. There should be a national level re-insurance company to facilitate the insurance business of the country.
2. The diversification of the investment portfolio should be done for the good level of return for optimum utilization of the collected premium.
3. Proper technical and financial estimation and evaluation should be done before making the claim payment for the insured property or persons.
4. The provision of strict & compulsory third party insurance should be done before licensing especially for vehicles.
5. Training and skill development of the persons involved in the insurance business should be increased.

6. Proper analysis of life of the property or human being should be done to calculate the premium amount for the specific policy.
7. Regular, timely and accurate financial statements of the ICs should be published on the leading national daily and should be made compulsion from the regulatory body, Insurance Board.
8. The concept of compulsory insurance should be adopted by the government to boost-up the insurance business.
9. The local government should build the awareness among the public for the compulsory fire insurance to the related properties during the official registration.

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Annex-I

Premium Collection by Sample Insurance Companies

On FI:

For AICL						
F/Y	**2058/59**	**2059/60**	**2060/61**	**2061/62**	**2062/63**	**2063/64**
TPC	80406638	141501755	149697781	139847238	131256417	179222566
FI	16075258	16651822	19093771	24554818	29557682	26878179
%	**19.99%**	**11.77%**	**12.75%**	**17.56%**	**22.52%**	**14.99%**
For EICL						
TPC	297840802	266089944	272203065	204248030	219715018	244361224
FI	39944672	38220313	49373388	51024517	57532249	64025353
%	**13.41%**	**14.36%**	**18.14%**	**24.98%**	**26.18%**	**26.20%**
For UIC(N)L						
TPC	56194245	76053952	90463421	113742096	131080159	146700473
FI	22440968	20168558	24201913	33331497	2547214	30179715
%	**39.93%**	**26.52%**	**26.75%**	**29.30%**	**19.44%**	**20.57%**
For HGICL						
TPC	154350524	151286399	145861274	198204554	220791553	209466062
FI	26043028	32537194	37989020	44148349	44163660	48987549
%	**16.87%**	**21.51%**	**26.04%**	**22.27%**	**20.00%**	**23.39%**
For NICL						
TPC	218086558	167182836	95878735	113282312	118991954	118250542
FI	22905319	24345428	27261314	29974583	30872015	37918365
%	**10.50%**	**14.56%**	**28.43%**	**26.46%**	**25.94%**	**32.07%**

Annex-II

Claim Payment by Sample Insurance Companies

On FI:

For AICL						
F/Y	**2058/59**	**2059/60**	**2060/61**	**2061/62**	**2062/63**	**2063/64**
NCP	8879731	14707219	16838849	22593234	23628569	30442938
FI	952928	1001935	759386	853529	543451	1149284
%	**10.72%**	**6.81%**	**4.51%**	**3.78%**	**2.30%**	**3.78%**
For EICL						
NCP	21144659	21913952	23387922	19769629	28134159	25935467
FI	2194511	6346069	3663906	1667249	3259600	3051834
%	**10.38%**	**28.96%**	**15.67%**	**8.43%**	**11.59%**	**11.77%**
For UIC(N)L						
NCP	8529005	10114813	11383827	14029961	18731645	24283207
FI	360736	471169	137924	326284	169128	105191
%	**4.23%**	**4.66%**	**1.21%**	**2.33%**	**0.90%**	**4.24%**
For HGICL						
NCP	10891291	8893558	16138503	21481988	23406008	30192662
FI	384124	482406	1397857	2575210	894438	632610
%	**3.53%**	**5.42%**	**8.66%**	**11.99%**	**3.82%**	**2.10%**
For NICL						
NCP	10844115	13932656	16839501	16747370	1319042	14117440
FI	1811010	924882	851166	875676	724098	862129
%	**16.70%**	**6.64%**	**5.05%**	**5.23%**	**5.51%**	**6.11%**

Annex-III

Test on Homogeneity in the Premium Collection of the Sample Insurance Companies

Null Hypothesis (H_0): «$_1$X«$_2$X«$_3$X«$_4$X«$_5$There is no homogeneity in the premium collection of the sample insurance companies.

Alternative Hypothesis (H_1): «$_1$ | «$_2$ | «$_3$ | «$_4$ | «$_5$ There is homogeneity in the premium collection of the sample insurance companies.

x_1	x_2	x_3	x_4	x_5	X_1^2	x_2^2	x_3^2	x_4^2	x_5^2
0.80	2.98	0.56	1.54	2.18	0.64	8.8804	0.3136	2.3716	4.7524
1.42	2066	0.76	1.51	1.67	2.0164	7.0756	0.5776	2.801	2.7889
1.50	2.72	0.90	1.45	0.96	2.25	7.3984	0.81	2.1025	0.9216
1.40	2.04	1.14	1.98	1.13	1.96	4.1616	1.2996	3.9204	1.2769
1.31	2.20	1.31	2.21	1.19	1.7161	4.84	1.7161	4.8841	1.4161
1.79	2.24	1.46	2.09	1.18	3.2041	5.0176	2.1316	4.3681	1.3924
$x_1 =$ 8.22	$x_2 =$ 14.84	$x_3 =$ 6.13	$x_4 =$ 10.78	$x_5 =$ 8.31	$X_1^2 =$ 11.7866	$x_2^2 =$ 37.3736	$x_3^2 =$ 6.8485	$x_4^2 =$ 19.9268	$x_5^2 =$ 12.5483

T= X_1 Γ X_2 Γ X_3 Γ X_4 Γ X_5 =8.22+14.84+6.13+10.78+8.31=48.28

C.F.= $\frac{T^2}{N}$ X $\frac{(48.28)^2}{30}$ =77.6986

T.S.S.= $X_{1_1}^2$ Γ X_2^2 Γ X_3^2 Γ X_4^2 Γ X_5^2 Z$C.F.$

=11.7866+37.3736+6.8485+19.9268+12.5483-77.6986

=10.7852

S.S.C.= $\frac{(\quad X_1)^2}{n_1} \Gamma \frac{(\quad X_2)^2}{n_2} \Gamma \frac{(\quad X_3)^2}{n_3} \Gamma \frac{(\quad X_4)^2}{n_4} \Gamma \frac{(\quad X_5)^2}{n_5} \mathrm{Z} C.F.$

$= \frac{(8.22)^2}{6} \Gamma \frac{(14.84)^2}{6} \Gamma \frac{(6.13)^2}{6} \Gamma \frac{(10.78)^2}{6} \Gamma \frac{(8.31)^2}{6} \mathrm{Z} 77.6986$

=7.4073

S.S.W.=T.S.S.-S.S.C.= 10.7852-7.4073=3.3779

Annex-IV

Test on Homogeneity in the Claim Paid of the Sample Insurance Companies

Null Hypothesis (H_0): $«_1 X «_2 X «_3 X «_4 X «_5$ There is no homogeneity in the claim paid of the sample insurance companies.

Alternative Hypothesis (H_1): $«_1 | «_2 | «_3 | «_4 | «_5$ There is homogeneity in the claim paid of the sample insurance companies.

X_1	X_2	X_3	X_4	X_5	X_1^2	X_2^2	X_3^2	X_4^2	X_5^2
0.09	0.21	0.09	0.11	0.11	0.0081	0.0441	0.0081	0.0121	0.0121
0.15	0.22	0.10	0.09	0.14	0.0225	0.0484	0.01	0.0081	0.0196
0.17	0.23	0.11	0.16	0.17	0.0289	0.0529	0.0121	0.0256	0.0289
0.23	0.20	0.14	0.21	0.16	0.0529	0.04	0.0196	0.0441	0.0256
0.24	0.28	0.19	0.23	0.13	0.0576	0.0784	0.0361	0.0529	0.0169
0.30	0.26	0.24	0.30	0.14	0.09	0.0676	0.0576	0.09	0.0196
$X_1 =$ 1.18	$X_2 =$ 1.4	$X_3 =$ 0.87	$X_4 =$ 1.1	$X_5 =$ 0.85	$X_1^2 =$ 0.26	$X_2^2 =$ 0.3314	$X_3^2 =$ 0.1435	$X_4^2 =$ 0.2328	$X_5^2 =$ 0.1227

T= $\quad X_1 \,\Gamma\quad X_2 \,\Gamma\quad X_3 \,\Gamma\quad X_4 \,\Gamma\quad X_5$ =1.18+1.4+0.87+1.1+0.85=5.4

C.F.= $\frac{T^2}{N} \mathrm{X} \frac{(5.4)^2}{30}$ =0.972

T.S.S.= $\quad X_{1_1}^2 \,\Gamma\quad X_2^2 \,\Gamma\quad X_3^2 \,\Gamma\quad X_4^2 \,\Gamma\quad X_5^2 \,\mathrm{Z} C.F.$

=0.26+0.3314+0.1435+0.2328+0.1227-0.972

=0.1184

S.S.C.= $\frac{(\quad X_1)^2}{n_1} \Gamma \frac{(\quad X_2)^2}{n_2} \Gamma \frac{(\quad X_3)^2}{n_3} \Gamma \frac{(\quad X_4)^2}{n_4} \Gamma \frac{(\quad X_5)^2}{n_5} \mathrm{Z} C.F.$

$= \frac{(1.18)^2}{6} \Gamma \frac{(1.4)^2}{6} \Gamma \frac{(0.87)^2}{6} \Gamma \frac{(1.1)^2}{6} \Gamma \frac{(0.85)^2}{6} \mathrm{Z} 0.972$

=0.889

S.S.W.=T.S.S.-S.S.C.= 0.1184-0.889=-0.7706