

**A Study on**

**Profitability Analysis of Insurance  
Companies in Nepal**

(With reference to Nepal Life Insurance Company Ltd. and  
Life Insurance Corporation Nepal Ltd.)

**A THESIS**

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In partial fulfillment of the requirement for the Degree of  
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**New Baneshwor, Kathmandu  
(April 2012)**

## **RECOMMENDATION**

This is to certify that the thesis

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**‘Profitability Analysis of Insurance Companies in Nepal**  
(With reference to Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd.)’

has been prepared as in the form as per the fulfillment of the partial requirements for the Master’s Degree in Business Studies (MBS) of the Faculty of Management. This thesis is forwarded for examination.

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## **VIVA VOCE SHEET**

We have concluded the viva voce examination of the thesis presented by

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and found that the thesis to be the original work of the student and written according to prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for Masters Degree in Business Studies.

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# DECLARATION

I hereby, declare that the work reported in this thesis entitled

**‘Profitability Analysis of Insurance Companies in Nepal**

(With reference to Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd.)’

Submitted to the Research Department of Nepal Commerce Campus, New Baneshwor, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of the requirements for the Masters of Business Studies (MBS), under the supervision of Mr Santosh Pokhrel, Asst. Lecturer of Nepal Commerce Campus Tribhuvan University.

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This research study entitled “Profitability Analysis of Insurance Companies in Nepal (With reference to Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd.)” has been carried out to fulfill the partial requirement of the Master's in Business study (MBS) on the course of completion of this thesis study, I was able to gain and share a lot of sweet memorable moments as well as better experiences. I got acquainted with the various terminologies, literatures and different personalities from different sectors as well.

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Mohan Adhikari

Researcher

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## ABBREVIATIONS

A.M.	:Arithmetic Mean
ALICO	:American Life Insurance Company
BS	:Bikram Sambat
Co.	:Company
CV	:Coefficient of Variance
GDP	:Gross Domestic Product
i.e.	:That is
IITA	:Interest Income to Total Assets
IITEA	:Interest Income to Total Earning Assets
IITI	:Interest Income to Total Income
LI	: Life Insurance
LIF	: Life Insurance Fund
LIC	:Life Insurance Corporation Nepal Limited
Ltd.	:Limited
MBS	:Masters of Business Study
NA	:Not Available
NLIC	:Nepal Life Insurance Company
NPLIF	:Net Profit to Life Insurance Fund
ROA	:Return on Assets
ROE	:Return on Equity
ROEA	:Return on Earning Assets
Rs.	:Rupees
SBI	:State Bank of India
SD	:Standard Deviation
Vol.	:Volume

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Background of the Study**

Growing number of companies in the Nepalese insurance market is the indication of mounting scope. Liberalized economic policies have attracted profit oriented joint venture companies. Insurance business is likely to hasten with the speeded economic activities. With the climb in purchase power of the people and improved educational level, the insurance business is predictable to take upward course. There has been a growth of premium by 15% in average in non-life insurance. The volume of premium has been mounting. Similarly, the agent for life insurance has enlarged very significantly as compared to last fiscal years. This gives a clue that there is a growth in life insurance as well.

Most of the industries and business houses have been closed down and those who have been operating in the current condition taking full fledged risk are not been able to perform their daily activities and earn as they have expected to earn. So in the present context profitability return is one of the most significant and difficult goal.

Importance of profit is hardly essential to be explained. Company should earn profits to stay alive and grow over a long period of time. Profits are vital as it would be wrong to assume that every action initiated by management of a company should be at maximizing profits, irrespective of social consequences. It is unlucky that the word profit is looked upon as a term of abuse since some firms always want to maximize profits at the attention of employees, customers and society. Except such occasional cases it is a fact that adequate profits must be earned to sustain the operations of the business to be able to obtain funds from investors for expansion and its growth and to contribute toward the social overhead for the wellbeing of the society.

Profit is the difference between revenues and expenses over a stage of time. Profit is the final 'output' of a company and it will have no future if it fails to make adequate profits. Therefore, the financial manager should endlessly evaluate the efficiency of the company in terms of profit. Therefore, the financial manager should continuously estimate the efficiency of the company in terms of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and refund of principle regularly. Owners want to get a mandatory rate of return on their investment. This is only possible when the company earns sufficient profits; profitability is an indicator of efficiency of the business organization. Profitability ratio measures the management's in general efficiency. This shows that higher the profitability higher the management efficiency and vice versa.

### **1.1.1 Introduction of Insurance**

Insurance is a agreement made by a company, society, or by the state, to offer a guarantee of compensation for loss, damage, sickness, death etc in return for standard payment. In other words, it can be said that any measure taken as a safeguard against loss, failure etc.

It is a universal fact that the outcomes of most activities are unsure. Uncertainty exists in every nature of businesses. So risk is coupled with it. There are no such devices or methods which authenticate that there is no risk and no chances of loss occurrence in any types of business. It should not necessarily be only businesses, even in the houses where we live; we are uncertain what is going to happen tomorrow because we don't know when earthquake occurs. In fact, it is alike to our lives as we absolutely have no idea about our exact long life. This is a tricky situation. Until now, we are able to transfer the risk primarily formed due to natural disaster or an accident in the form of insurance but unable to eliminate in first hand. It is beyond our competence to control natural calamities or an accident.

Insurance is a precautionary measure that has been taken by any party's to reimburse for the loss incurred due to any undesirable events. It is an intangible service which

helps to get relieve from the painful sufferings caused by the uncertainties. Thus the insurance provides a relief in the form of compensation packages in a period of worried need.

In a period of deepest sorrow and need, when funds emerge to drain into abyss of creditor's demand and estate duties, the cheque brought in the form of insurance claims provide great break. So, insurance offers excellent financial protection.

Industrial and commercial risks are more compounded. Apart from the normal trading risks, they are exposed to various natural and man created danger, the result of which can kick them completely out of the business. Moreover, not all the risks are insurable which means the careful risk management should be administered. Risk management deals with the technique of identification, evaluation and treatment of risks. After appropriately identifying the risk one is exposed to, one has to evaluate the monetary consequences of such risks before thinking of handling of the risks which may be willfully assuming certain risks oneself and transferring others by various devices including insurance. Insurance is one of the risk shift mechanism.

Insurance is not a luxury; it is a necessity especially when one's paid up assets is few. Many people think insurance is for the rich people as they can afford but it is precisely for those who are not financially secure.

Insurance business is broadly classified into two groups

1. General Insurance (non-life)
2. Life Insurance

There are various types of services offered by General insurance and the most important services are:

1. Vehicle Insurance
2. Marine Insurance
3. Fire Insurance

Similarly, Life insurance is mainly focused on the life of individual. It is related to the health of individual or policy that jackets the unnatural death of an individual.

### **1.1.2 Brief Introduction of Insurance Industry of Nepal**

In Nepal, there are 25 insurance companies. One of them is fully government owned corporation. Most of the insurance companies are invested by private segment of the nation whereas some of them are joint venture with foreign companies and some are completely foreign investment company. Out of these these insurance companies, 1 company is in service to both life and non-life insurance business whereas other 8 are holding life insurance and other 16 are nonlife insurance companies. (<http://www.bsib.org.np>- Bima Samiti official website)

Following are insurance companies which are operating only the life insurance business.

1. American Life Insurance Company (ALICO)
2. Asian Life Insurance Company Ltd.
3. Gurans Life Insurance Company Ltd.
4. Life Insurance Corporation (Nepal) ltd.
5. National Life Insurance Company Ltd.
6. Nepal Life Insurance Co. Ltd.
7. Prime Life Insurance Company Ltd.
8. Surya Life Insurance Company Ltd.

Similarly, Below listed company operate both life and non-life insurance business.

1. Rastriya Beema Sansthan

Following are non-life insurance companies.

1. Alliance Insurance Co. Ltd.
2. Everest Insurance Co. Ltd.
3. Himalayan General Insurance Co. Ltd.
4. Lumbini General Insurance Co. Ltd.

5. N B Insurance Co. Ltd.
6. National Insurance Co. Ltd.
7. Neco Insurance Co. Ltd.
8. Nepal Insurance Co. Ltd
9. NLG Insurance Co. Ltd
10. Premier Insurance Co. Ltd.
11. Prudential Insurance Co. Ltd.
12. Sagarmatha Insurance Co. Ltd.
13. Shree Shikhar Insurance Co. Ltd.
14. Siddhartha Insurance Co. Ltd.
15. The Oriental Insurance Co. Ltd.
16. United Insurance Co. (Nepal) Ltd.

Growing number of companies in the Nepalese insurance market is the signal of expanding scope. Liberalized economic policies have tempted profit oriented joint venture companies. Insurance business is likely to accelerate with the speed economic activities. With the rise in purchase muscle of the people and improved in educational level, the insurance business is expected to take upward route. There has been a growth of premium by 15% in standard in non-life insurance. The volume of premium has been increasing. Similarly, the agent for life insurance has increased very considerably as compared to last fiscal year. This gives a hint that there is a growth in life insurance as well.

The fact that premium rate is decreased but the overall premium collection in insurance industry has increased advice the increase of market size. In this industry, there is a profitability of 10%-15%. Because of lucrative profitability, there have been 25 insurance companies.

The insurance Act 1993 has created an insurance regulatory Authority named "Insurance Committee" empowering to expand and regulate the insurance business, fix the priority area to invest the premium income, license and to facilitate administrative procedure to permit to function the insurance companies. The act has fixed the paid up capital requiring Rs. 300 million to run the insurance business. No

restriction is imposed between national and alien companies as to inflowing into business.

The existence of economic and technological distorted between incumbent foreign investor has competitive advantage and the superiority of being foreign firms.

Due to low security, particularly in the context of Maoist insurgency most of the insurance companies have amplified the premium particularly in terrorism insurance, which has discouraged the potential insured. Similarly, some insurance companies unnecessarily delay the claim or compensate very less has created panic among insured and bounded to think twice before purchasing policy. But in overall, the premium for other services such as fire insurance, vehicle insurance has declined.

As there are several insurance companies in Nepal, competition is harsh. As a result, this industry is going through innovation in its services offerings for example, services are ranged from theft insurance to mobile insurance.

The market for life insurance is incredible and players are very few in this segment. There are hardly more than five major players in this segment. Concept of life insurance is still mysterious to majority of Nepalese.

### **1.1.3 Profiles of the Insurance Companies under Study**

#### **1.1.3.1 Nepal Life Insurance Company Limited**

Nepal Life Insurance Company Limited was established as a public limited company in 2058-1-1-21 BS under Company Act, 2053BS and Insurance Act, 2049BS. It was established in the pure Nepalese investment of the private sector. In has operating life insurance business by opening twelve branches offices in main urban area of Nepal. Its branch offences are located in Kathmandu, Banepa, Birgunj, Nepalgunj, Pokhara, Mahendranagar, Lahan, Janakpur, Biratnagar, Narayanghat, Butawal and Birtamodh. Life insurance policies are issued by every branches of the company. Total paid up capital of the company is Rs 375 million out of which 80% was paid by the founder member of the company and rest 20% by the general public.

### **1.1.3.2 Life Insurance Corporation Nepal Limited**

Life Insurance Corporation Nepal Limited was established under the Company Act, 2053 and Insurance Act, 2049 in the joint capital investment with Indian Life Insurance Corporation by the private sector of Nepal. It was registered in 2058-4-23 and started its life insurance transactions from 2058-6-1 BS. It has operating life insurance business by opening the branches offices in main urban area of Nepal. Its branch offices are located in Kathmandu, Biratnagar, Birgunj, Dharan, Janakpur, Birtamodh, Butwal, Dhangadhi, Pokhara, Nepalgunj, Bhairahawa, Gaighat, and Gaur. Total paid up capital of the company is Rs 250 million out of which 80% was paid by the founder member of the company and rest 20% by the general public.

## **1.2 Statement of Problem**

Nepal, like any other country has been laying emphasis on the upliftment of its economy. The process of economic development depends upon various factors. Financial institutions are viewed as catalyst in the process of economic growth. The mobilization of domestic resources, capital formation and its proper utilization plays an important role in the economic development of a country. Every financial institution, big or small, either banks or insurance companies play an important role in the development of a country. In other hand, these financial sectors, banking and insurance, is regarded as a profitable sector. Insurance industry in the judgment of the layman appears as a very profitable sector.

However, unlike the general perception, the industry is plagued with immense challenges to sustain it and outpace those within the industry, mainly due to rising competition and weak economic situation in the country. The following problems are currently prevailing in the insurance companies regarding the profitability of them.

- Whether insurance companies are improving the profitability or not?
- Whether curtailment of expenses of strategic importance is crucial in betterment of profitability or not? ,
- Whether the trend of the profitability is increasing or not?

- Whether investment on assets or other utilization of resources affects the profitability trend or not?
- Whether or not the external or internal environmental factors affect the profitability?
- Does there any relationship on profitability variables or not?

### **1.3 Objectives of the Study**

The study basically aims to fulfill the partial requirement for the Degree of Master of Business Studies (MBS). The study mainly focuses on the profitability analysis of Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd. and to suggest recommendation based upon it. The specific objectives of this study are:

- To evaluate and analyze the soundness of profitability of the companies.
- To evaluate and study the relation of different factors like assets, Interest income, Managerial Expenses and Life Insurance Fund on profitability.
- To provide recommendation to the management in improving their activities to increase profitability on the basis of the result and the study.

### **1.4 Significance of the Study**

Profitability is regarded as the lifeblood for any enterprise because it is required for growth and expansion. If the business cannot maintain a pleasing level of profitability, it is not regarded as a good enterprise and may even close. Insurance industry is very important sector for economic growth in a country. Insurance business is regarded as a profitable sector. So an independent study of profitability on insurance business is noteworthy for the stakeholders and the persons who are interest on it. Researcher believes that following organization and individual will be benefited from the study.

- Individual who will carryout further research work in profitability of insurance companies.
- Insurance companies whose study been made.
- Individuals who have keen interest in Nepalese economy and insurance industry.

- Investors, policy holders and other stakeholders. Students, teachers, managers, policymakers, etc.

## **1.5 Limitations of the Study**

The study and outcome of the study will be an individual effort. Therefore management and resource mobilization will limit the detail study of few insurance companies operating in the country.

- The study is based on secondary data; therefore, the accuracy of results and conclusions extremely depends upon the reliability of these data.
- The evaluation is made through the analysis of financial statement published and offered by the companies.
- As the title specifies the study covers about profitability subject only others aspect beside these are not studied.
- Resource, time, money constraints and inaccessibility of sufficient information also limit the conclusion drawn from study.
- This study may vary comprehensive as it is prepared to fulfill the partial requirement of the MBS program.

## **1.6 Organization of the Study**

Considering the objectives in mind, the study has been ordered into the following five chapters:

### **Chapter 1: Introduction**

The first chapter includes a concise introduction of the study; it includes background of the study, focus of the study, statement of problem, objectives of the study, need of the study and limitation of the study.

### **Chapter 2: Review of Literature**

Chapter two includes conceptual framework, review of books, and review of previous study, reports, dissertation and journal articles related to the issue of the study.

### **Chapter 3: Research Methodology**

The third chapter contains the whole system of this research work i.e. research design, sources of data, populations and sample, data processing, method of analysis.

### **Chapter 4: Data Presentation and Analysis**

Fourth chapter consists of systematic presentation and analysis of financial statement employing financial and statistical tool. It also comprises major findings.

### **Chapter 5: Summary, Conclusion and Recommendation**

The fifth chapter includes a brief summary of whole research report and its conclusion. It also includes some of use suggestions to the concerned parties and recommendation.

# **CHAPTER II**

## **REVIEW OF LITERATURE**

### **2.1 Conceptual Review**

In this section conceptual and theoretical review of profit, profit – a traditional approach and the modern approach, profit theories, factors affecting profit, functions of profit, profit and profitability and stability of profit has described.

#### **2.1.1 General Concept of Profit**

If we ask what the profit is, to a layman, the common answer would be the excess of income over expenses. Actually, in the simple sense it is totally true. If we deduct expenses by income then the difference amount is profit and if it comes negative then we term it as loss.

The simple definition of profit according to Oxford English Dictionary is, "Money gained in business especially the difference between amounts earned and amount spent." (Hornby; 1996:924) It further explains, "The financial gain in a transaction; the excess of returns over outlay; the surplus of a company or business after deducting wages, cost of raw materials, interest, and other expenses". But in order to describe from the technical view point, it is the surplus resulting after a defined trading period but must be regarded as the first essential charge upon business, being a reward a fort engaging resources in conditions of speculative risk for the satisfaction of consumer demand. It furnishes resources to invest in future operations and consequently its absences must result in a decline in effective capital resources and ultimately competitive extinction of the business.

"Profit is the sum remaining after the payment of all wages in economics includes payments to officers of corporations, to proprietors, to partners and to farmers, as well as to what we today term labour, and rent on the unimproved value of land, as the

return to capital." (Foulke; 1998: 56) This is one of the broadest definition that clearly defines what the profit is and how is it formed.

It is necessarily a residual amount. Land, labour and capital are frequently used under contracts whereby they receive a predetermined return. A net profit is a sum over and above the ordinary costs of business including such contractual outlay. Nobody contracts to pay the entrepreneur the residual sum, which constitutes net profit. Business profits are, therefore especially contingent upon successful management of risk. Business is faced with a number of uncertainties: (1) technical uncertainties- those relating to the physical process of production (2) cost uncertainties either due to change in the prices of raw materials, wages, rent etc. or due to technology changes. (3) Demand uncertainties either due to changes in consumer preferences or due to demand uncertainties either due to changes in consumer preferences or due to innovation of new products and obsolesces of the existing products. (4) Market uncertainties- those relating to the future price of the product and the volume of sales. The entrepreneur receives a reward for combining the factors of productions to meet the economic needs of a world faced with uncertainties. He takes a risk, which others are unwilling to bear, and if he successfully manages the risk, he receives profits. The means that a business man, in order to earn profits, has to do two things: (1) select the risks which he wishes to bear, and (2) manage them successfully. The selection of risk is made at almost every step of businessman's career. His important problem is the selection of business in which he wishes to engage himself. But even thereafter many risks arise. Some of them he may give to bear even though he would rather not: others he may transfer to people more willing to bear them (or unable to escape them): still others he may shift by insurance. (Varshney & Maheshware; 1979: 300)

Some experts explain profit as a measuring rod that measures the efficiency of business organization. According to them it is just a tool in measuring the efficiency of the activity of the firm. If it is positive then activity of the organization is on the right track else in the wrong track.

Profit is simply, convenient and the most popular yardstick of Judging the efficiency to a business enterprise in private as well public sector. For private enterprise, it is taken to be the most satisfactory criterion of efficiency. Profit helps in judging the overall

efficiency and is easy to calculate, Even through profit maximization, unlike private enterprise, is not objective of public enterprises, yet profit serves as a well-accepted criterion for judging the public enterprises, yet profit serves as a well accepted criterion for judging the overall efficiency of public enterprises too." (Narayan; 1980: 206) He states that the profit is not the main object of the public firm but the question arises how would the public firm survive? Would it be the government who would be responsible for its survival and successful operation?

R.R. Gilchrist and Argent expresses similar view that profit is equipment for measuring the organizations efficiency and effectiveness.

In the opinion of R.R. Gilchrist, "The profit is the ultimate measure of effectiveness. A profitable company is likely to offer not only security of employment but also promotion prospects job opportunities and the intense personnel motivation that comes from being associated with success." (Argent; 1968: 34)

"Profit is the Barometer of the success of business. It is indeed, a magic eye that mirrors all aspects of entire business organization including the quality output." (Argent; 1968:68)

Apart from successful operation, there may sometimes be less from external environment which cannot be controlled by the organizations. Let's for instance take war or any natural calamities or change in government and international rules and regulations. So in this case this definition is yet to be updated.

These definitions summarize one profit i.e. profit is the main financial indicator of business firm which is indeed a need to survive and grow the business environment. Profit is essential to raise the market price of share and to attract additional capital investment. Profit is outcome of good management, cost control, credit risk management, efficiency of operation, etc. Simply stated, profit is money excess of sale over money spent but the term Profits vary controversial and there are several different definitions and its interpretations.

Usually profit does not just happen. Profits are managed before we can move an intelligent approach to the managerial accept of profit. There are after all, several

different interpretations of term 'profit'. An economist will say that profit is the reward for entrepreneurship for risk taking. A labour leader might say that it is a measure of how efficiently labour has produced and that it provides a base for negotiating a wage increase. An investor will view it as a gauge of the return on his/her money. An internal revenue agent might regard it as a base for determining income taxes. The accountant will define it simply as the excess of firm's revenue over expenditure of producing revenue in given fiscal period." (Lynch & Williamson; 1989: 99-100) He has accumulated the wide view and perspective of what people in the different sector think about profit. These people may be an economist or labor or investor or accountant or manager.

Significance of profit to a business firm can hardly be neglected. It is equally important as for nutrition is required for human beings and animals to survive. To cover costs of staying in business such as replacement of machines, furniture, obsolescence of machines, market or technical risks, etc., profit is necessary. It is also essential in the sense to ensure supply of future capital. It provides capital through retained profits. According to the self-financing principle, it provides access to attract outsiders' capital. Naturally, investors would invest their money in a firm where there is adequate profit formation. Hence, profit is required to ensure and satisfy the entire expectation of management, shareholders or investors, employees and nation as a whole.

Ronald I. Robinson takes profit as the requirement for its existence and to survive in the long term. He explains, "Profit is essential for every enterprise to survive in the long run as well as to maintain capital adequacy through retain earning. It is also necessary to accept market for both debts and equity to provide funds for increased assistance to the productive sectors."(Robinson, 1951: 21)

R. Cauvery explains profit in accounting terminology and in economic sense. According to him, "Profit in the accounting sense is the excess of revenue receipts over the costs incurred in producing this revenue. This concept of profit is also known as residual concept. But in economics, both implicit and explicit costs are deducted from total sales revenue in determining profits." (Cauvery, 1997: 122-123)

A. H. Taylor & H. Shering has given bit different view in profit. They have described as inspiring agents which pressurize the management to gain more efficiency by cost reduction, greater turnover. "The profit motive remains on the main springs of an enterprise and spur to efficiency. It is clearly the desire to make profit which inspires the search for more efficient methods, reduced unit cost, better organization and greater turnover." (Taylor & Shering; 1966: 170)

So from the above definition we can conclude that the profit is not only important for the survival of any business firm but is also an aspiring, motivating agent, a measuring rod for measuring the efficiency of each and every organization which should be taken as the major aim whose fulfillment cannot be diverted.

### **2.1.2 Profit- A Traditional Approach**

From the past history, we see that the primary and final objective of every business enterprise is to maximize profit and all its activities are directly focused in earning profit. This traditional approach ignores the concept of external and internal environment that are directly and indirectly concerned with business and its positive and negative impact in. But this does not mean that the businessman in the past period does not spend for social welfare. Profit maximization approach is the most important assumption of economic theory also proves this fact. It always assumes that a firm sets target to maximize the profit and is discretionary behavior of the firm. Maximize profit is taken as the central belief. In the past the government provided their full support for the industrialist and the businessmen for smooth operation of their activities in achieving and maximizing their profit. The consequent in the global environment was hardly taken into consideration. This does not mean that the consequent in the external environment like society, culture and other factors like legality etc. were ignored or neglected.

Profit is the measurement of the corporation's overall performance. A corporation can claim itself to be successful it can maintain maximum profit to justify the worth of the return on investment. This helps corporation to save from shortage of funds and provides best opportunities to undertake the expansion of assets to enlarge business." (Sherstha; 1980: 23-24) He explains that the profit is only measures of success and

those who able to maintain maximum profit is the most successful one. This would also help the organization to save form the shortage of funds, which can also lead to bankruptcy of that organization.

"It provides yardstick by which economic performance can be judged. It leads to efficient allocation of resources. It ensures maximum social welfare. (Khan & Jain; 1999: 1.9) This shows that the profit maximization is deeply rooted in the society and is taken as central belief because success measurement of any firm is done by how much profit has been able to acquire.

There was a strong belief or assumption in the society that in the process of maximizing profits, society's resources are efficiently utilized. These resources may be in the form of human resources, natural resources like land, water, mines, flora, and fauna or man made resources like machinery, vehicles and buildings, which have cyclic effect in the economic development of the society. So firms adopt those ventures which increase profits and unprofitable activities are dropped.

This concept was taken to be advantageous while the business structure or firms were self-financing, single entrepreneurship and taken as private property. Obviously, profit maximization was entertained by the single owner to enhance his individual wealth and personal power in the past days. So it is now regarded or explained as a self-centered who has single dimensional aspect.

### **2.1.3 Profit – A Modern Approach**

Modern business environment is completely different form that of the past, whether form the technological viewpoint or form the conceptual viewpoint. Today the activities that a firm performs have multi-dimensional aspect. So a firm must set several schedules with different objectives apart form profit maximization. Concept of social responsibility in the modern days was introduced with a view that only maximizing the profit is not the sole objective of a firm. The firm should use the acquired profit from its activities in the social welfare.

Businesses have multiple goals and the need of survival, goodwill, security or growth commonly calls for some sacrifice of short-term profits. Most businesses do, however,

rate profitability consistently high among their long-term objectives and it could be argued that short-term goal such as security and growth are in fact, subordinate to long term profitability. (Salvage and Smell; 1967:30)

The business firm today is financed by equity owners, creditors and professional management. Likewise customers, employees, government, society are connected with firm which we then in the modern language as the stakeholders. So in order to protect the interest of these stakeholders different concepts in the protection of their rights are developed and implemented.

Apart from it, government also imposed different acts for preservation of the environment or environmental protection, consumer protection trade and merchandise marks protection different ethics and values in business. Besides several other objective of a firm, shareholder' wealth maximization is taken as a normative goal of the firm or otherwise a firm should set a standard for reasonable profit. The principle of maximization of share holders' wealth following timing of returns and risk provides a rational guide for running a business and for efficient allocation of resources in society. "In developing countries the corporation have to determine what the outcome would be before allocation the resource in the attempt to maximize the social benefit side by side in accompanying the maximizing the share holders wealth. (Shrestha; 1980:25, 26)

#### **2.1.4 Profit Theories**

With the passage of time in the history of economic thought, wide range of theories are developed and in the process to explain the exact meaning of profit. Each of the many theories that have been offered, however, tends to focus upon just some small fraction of the various aspects of profit (e.g., its source, components or function). Nevertheless, most profit theories can be classified as one of three major types: (Seo; 1988: 424)

- Compensatory or Functional Theories
- Frictional and Monopoly Theories
- Technology and Innovation Theories

This classification cannot be all inclusive. Furthermore it should be taken to mean that one type of theory may not contain elements of other types. It merely points out of the differences in orientation that have emerged historically in the course of thinking about profit. For this reason, this classification represents a fair arrangement of the major issues involved in profit analyzing and convenient starting point for approaching them in managerial decision making.

#### **2.1.4.1 Compensatory or Functional Theories**

This group of theorist holds that economic profits (surplus) are the necessary payments to the entrepreneur in return for coordinating and controlling production. It is the entrepreneur who organizes the factors of production into a logical sequence, plans their efficient combination, and establishes policies to see that production is carried out. Profits, therefore, are the compensation for fulfilling these functions successfully.

Functional theories were proposed in the early 19<sup>th</sup> century, before the advent of large corporations. At that time, the entrepreneur was regarded as a higher type of laborer, similar in certain ways to an individual proprietor. When attempt were made later, however, to apply functional theories to modern publicly owned corporations with their separation of ownership and control, the results appeared confusing and contradictory.

In the corporate form of business organization, the coordinative function is usually delegated by the owners (stockholders) to professional salaried executives. If executive remuneration is taken to be profits, despite its contractual form, the theory still leaves unexplained the residual income of the enterprise that goes to stockholders who exercise no active control. The only alternative, if functional theories are to be consistent with their original definition, is to allocate a share of the entrepreneurial function to stockholders. But attempts to do this are not in accord with the reality that the corporation is an organization of active leadership by managers and passive ownership by stockholders. With the growing importance of the large corporation as a

dominant type of business organization in the American economy, functional profit theories lost much of their usefulness. In their place, a group of friction and monopoly theories emerged around the turn of the century.

#### **2.1.4.2 Friction and Monopoly Theories**

By 1900, the theory of a stationary economy had very nearly become a complete and unified system of thought. Against this background, the noted American economist, J.B. Clark, constructed an economic model that was intended to be a reconciliation of static theoretical laws and the dynamic world of fact. In modern times, this model has been called the model of perfect competition.

Fundamental assumptions of the model of perfect competition are the complete mobility of resources and the freedom of firms to enter and exit the market. Thus the economy is characterized by a smooth and frictionless flow of resources, with the system automatically slipping into equilibrium through the free play of market forces. Changes may occur that cause a departure from equilibrium, but so long as resources are mobilized and opportunities are equally accessible to all economic entities (i.e., knowledge is perfect), the adjustment to a new equilibrium is accomplished quickly and smoothly. In this type of economic equilibrium all factors of production receive their opportunity costs' and an enterprise's revenues exactly equal its costs (including the imputed wages and interest of the owner). Hence no economic surplus or profit residual can result.

#### **2.1.4.3 Technology and Innovation Theories**

This group of theories holds that new technology gives rise to inventions, and inventions adapted to business use become innovations. Many inventions, of course, do not become innovations. But those that do, being dynamic phenomena, upset the equilibrium of an otherwise static system. The original purpose of the innovation theory proposed by the late Professor Joseph Schumpeter was to show how business cycles result from these technological disturbances and from successive adaptations to them by business. His procedure was to assume a stationary system in equilibrium in which all economic life is repetitive and goes on smoothly, without disturbance. Into

this system a shock-an innovation-is introduced by an enterprising and forward looking entrepreneur who foresees the possibility of extra profit. The quietude and intricate balance of the system are thus disrupted. The successful innovation prompts a large number of businessmen (Followers rather than leaders) to plunge ahead and adopt the innovation. In turn such mass rushes create and stir up secondary waves of business activity. When the disturbance finally subsides, the system settles into equilibrium once again only to be disturbed later on by another innovation. Economic development thus takes place as a series of fits and starts (cycles) rather than as a smooth and continuous process.

Innovation refers broadly to any purposeful change in production methods or consumer tastes that output that increases national output more than it increases costs. The increase in net output is the profit that comes from innovation. It includes not only new products such as synthetic fibers but also new organizations, new markets, new promotion and new raw materials. It may also include a new way of doing old things or a different combination of existing methods to accomplish new things. To an important degree, innovation has been built into the competitive system complete with research and advertising staff.

The innovation theory focused on the dynamic, uncertain, ever changing nature of capitalism. It holds that the only limits to human progress are the inherent limits of human beings themselves.

From the stand point of managerial economics, a theory's value is not so much determined by how well it explains the past or even the present, but how well it predicts the future. For this purpose, the innovation theory is somewhat inadequate because it cannot foresee whether or when an invention will become an innovation.

### **2.1.5 Factors Affecting Profit**

Profits vary from industry to industry and from businessman to businessman. The greater the risk and uncertainty in business or industry, the greater are the opportunities for large profits. Similarly, those businessmen who are temperamentally cautious and are not willing to assume large risks get a smaller margin of profit as

compared to those who are more confident and adventurous. Since risks, profit and losses appear because of changes and uncertainties in a dynamic society, profits vary from year to year as well.

Profits are likely to be high in industries in which methods of production are constantly changing so that there is continuous adoption of new techniques;

- a) In emerging industries the prospects of which are rather uncertain.
- b) In industries in which there is a large development period.
- c) In industries in which resources are irrevocably committed to narrowly specialized tasks.

Profits are also affected by the level of business activity. If business is brisk and firms are operating at their maximum capacity, their average costs would be reduced to the minimum while their sales would be maximum. This would lead to higher profits. Profits would be reduced if the business activity is at low ebb or flow.

### **2.1.6 Functions of Profit**

The basic function of profit is to provide businessmen with an incentive to produce what consumers want, and when and where they want it at the lowest feasible cost. This includes innovation of new products and new methods. In fact, the profit motive is the kingpin of Peter Drucker, profit serves three main purposes.

#### **a. Measure of Performance**

It measures the net effectiveness and soundness of a business effort. A higher profit is an indicator that the business is being run successfully and effectively. It is true that profit is far from being a perfect measure of business efficiency but it is probably the best indicator of the general efficiency of a firm. It is certainly the only one which allows quick and easy comparison of performance of various firms.

#### **b. Premium to Cover Costs of Staying in Business**

Profit is the premium that covers the costs of staying in business replacement, obsolescence, market and technical risk and uncertainty. Seen from this point of view,

it may be argued that there is no such thing as profit; these are only the costs of being and staying in business. The management of a business has to provide adequately for this cost by generation sufficient profit.

### **c. Ensuring Supply of Future Capital**

Profit ensures the supply of future capital from innovation and expansion, either directly by providing the means of self financing out of retained profits, or indirectly through providing sufficient inducement from new external capital which will optimize the company's capital structure and minimize its cost of capital.

The primary goal of a business firm is to ensure its own survival. From this point of view, the firm must make a profit because profits are indispensable to remaining viable, to remain alive. Again the firm must have growth because that is the only way it can perpetuate itself as an institution. And profits are a natural concomitant of the growth and development of business over time.

### **2.1.7 Profit and Profitability**

When these two words, 'Profit and Profitability' are presented together most people confuse because they think these both have same meaning. Those word profitability is derived form word profit is has bit different meaning than that of profit. Profit can be taken as the excess of income over expenses or it is the residual valance of earning expected to be available from total revenue of a time period. It is also taken as the reward of entrepreneurship for taking risk.

Whereas word profitability, is the ability or capacity of a firm or any business enterprises or any entrepreneur to make profit. Profitability can be broken down into 'profit and 'ability' which means the capacity to make profit. According to Howard and Upton, "The word profitability may be defined as the ability of a give investment to earn return in its use." (Howard & Upton; 1961: 186) So any instrument if earns return in its use can be termed as the profitability of that instrument. It is a deviation of the term profit. It can also be termed as the basic efficiency measuring rod of success of business enterprise. Profitability is basically an arc around which the every business revolves.

W. M. Harper has tried to give distinct explanations between profit and profitability. According to him, “The Profitability is a relative measure. It indicates the most profitable alternative. The profit, in the other hand is an absolute measure. It indicates the overall amount of profit earned by transactions” (Harper; 1999: 4)

**Table: 2.1**  
**Difference between Profit and Profitability**

<b>Profit</b>	<b>Profitability</b>
It is an absolute measure	It is the relative measure
It indicates the overall amount of profit earned by transactions	It indicates the most profitable alternative

K.K. Seo has expressed his distinct view on profit and profitability. “Profit in an economic sense is the difference between the cash value of the enterprise at the beginning and end of the period.” (Seo; 1988:433) Like wise “True profitability of any investment or business operation cannot be determined until the ownership of the investment or business has been fully terminated.” (Seo; 1988:430)

So these definitions clearly explain the relationship, similarity and difference between profit and profitability.

### **2.1.8 Stability of Profitability**

Acquiring profit for the company or any business organization is not a great thing. Maintaining it or making stable in the long run is one of the most challenging thing that we all know because there are various internal and external factors that directly and indirectly affect the profitability of the organization. So to minimize the affect on profit by these elements and take advantage from them long term and short term study depending upon the nature of the institution and related field is required through which we can accurately analyze the situation and then forecast accordingly. For acquiring stability in the profitability of any organization pre study and research, good internal management and external management, good plan policy making with the help of experts and related workgroup, implementation of that policy and plans

revision of the performance of the policy and develop according to the achieved result is required. Same phases of activities are also applied in the banking sector.

## **2.2 Review of Thesis**

In the past years we can see many researches in the profitability analysis and financial performance analysis of the Nepalese commercial banks but no study has been made research in the profitability analysis of insurance companies. So these available research works regarding profitability of commercial banks have been reviewed.

**Mahat** (2006) in his work had tried to deal with the profitability of Joint Venture Banks in Nepal.

Major objectives on the basis of which study is done are as follows:

- To evaluate and compared the soundness of profitability and operation efficiency along several joint venture banks.
- To compare and analyze fund based interest income with fee based income of joint Ventured Banks in light of interest earning assets.
- To compare the cost of deposits of the Joint Ventured Banks in regard with profitability.

The major conclusions of the study are as follows:

- Net profit margin ratio of Standard Chartered Bank Ltd. is found best performer and following by Nabil Bank Ltd. and Himalayan Bank Ltd. with the next best performer.
- The established banks have gold tract record of their financial position and the newly established are penetrating the market. All the banks are operation in profit although some of them suffered from losses during initial stages.
- The correlation coefficient which measures the relationship between the market value seems highly significant for the Bank of Kathmandu Ltd. Nepal SBI Bank Ltd., and Nepal Bangladesh Bank Ltd. However these are negative relationship between market value and book value for Nabil Bank Ltd. and Standard Chartered Bank Nepal Ltd.

Likewise the major recommendations that are made on the basis of the study are as follows.

- The commercial bank has been investing more in government securities rather than in loans and advances. So the author recommends the commercial banks to invest in the most earning assets i.e. loan and advances than that in non earning assets.
- The joint venture banks are found least participated in the aspects of boosting up foreign investment in the kingdom. Thus the joint ventured commercial banks should strongly establish the bank which can achieve by using its wide, modern and strong means of communications.

**Shrestha** (2008) in his research has tried to analyze the profitability position of Standard Chartered Bank Nepal Ltd. and Nabil Bank Ltd. During the research work he has set the following specific objectives which are as follows.

- To evaluate the soundness of profitability and operation efficiency of Nabil in comparison with that of standard Chartered Bank Nepal Ltd.
- To compare and analyze fund based interest income with fee based income of Nabil Bank in comparison with that of Standard Chartered Bank in light of interest earning assets.
- To compare the cost of deposits of the two banks in regard with the profitability.

The major findings of the thesis concerned to profitability are as follows.

- Both the banks interest income to total earning assets ratio are decreasing. Earning spread rate of both of the banks ratio are also decreasing. Both of them are negative sign to the banks performance.
- Both the banks net profit margin is decreasing every year. However Nabil's net profit is more than that of Standard Chartered bank Nepal Ltd. and interest margin of Nabil is more than that of Standard Chartered.

Major recommendations that are given by the researcher on the basis of research are as follows:

- The study reveals that Nabil Bank has not adapted any cost management strategy to have control over its cost of funding. Nabil has paid very higher interest to deposits and other working funds than Standard Chartered bank. The cost of management strategy would be ideal to reduce the various costs and increase the profitability.
- The fees based on activities of banks like commission, discount and fees are found to be very profitable and important nowadays in the banking business. They yield high return to a bank. Both the banks are not in the better position regarding the proportion of fee based activities to loan and advances. It is recommend to enhance the off balance operation as it is very profitable and immediately realizable.
- Majority of joint venture banks have been found to be profit oriented ignoring their social responsibility. For a survival for a long run, banks should be able to render their services in the rural, deprived areas. For more social movements, the bank is suggested to introduce a scheme like loan for further study to the student, loan for promoting skills of women or unemployed housewives.

**Joshi** (2008) in his research paper on the financial analysis on the context of Nepalese commercial banks, following facts has been revealed.

Objectives set in the research are as follows:

- To find comparative financial strength and weakness of various commercial banks.
- To find return rate and expected return to the shareholders
- To study systematic and unsystematic risk.

**Shrestha** (2009) in his study on Non-Performing Assets and Profitability Management of Commercial Banks has shown following analysis:

The objectives of Mr. Shrestha's study were:

- To analyze the non-performing assets and not performing loan to total loan of the banks under study.
- To study and evaluate the relationship between their profitability and the non-performing assets of EBL and Nepal SBI Bank.
- To study the proportion of NPAs to total assets, total deposits and total lending of both the banks under study.

Findings related to profitability analysis has shown:

- SBI and EBL Bank have high degree of positive correlation i.e. the total lending is directly dependent on the level.
- The case of both sample banks total NPA and the profit have been found to be increasing.
- Both banks has high degree of positive correlation on the total lending which is directly dependent on the level of NPA. Higher the Npa the more will be the total lending of banks and vice versa has found.

**Bhandari (2010)** has made a comparative study on Liquidity and profitability management of JV banks in Nepal and has included following

The main objective of the study was covered on:

- To study and examine the relationship between liquidity and profitability of joint venture banks.
- To determine the operational efficiency of the management of the banks
- To evaluate how efficiently the total assets have been used by the management of the banks
- To provide constructive suggestions to overcome the problem on the basis of the study findings.

Findings:

- The average net profit ratio of NABIL is comparatively earning higher than EBL and HBL.
- The average ROA of HBL and EBL are comparatively less than Nabil. Which indicates overall resources used by Nabil is more efficient than others.
- The trend analysis of Net profit of concern banks shows that all jvb's have an increasing trend.
- The analysis with reference to different statistical and financial tools shows the strength position of NABIL bank rather than EBL and HBL.

Conclusions made on the basis of his research work are:

- Lending condition of banks is in decreasing trend. Strong banks are holding good customers and discouraging low rates and less amount loans. Instead of that they are initiated towards remittance, bank guarantees and other commission generating activities. While other banks are showing aggressive and are spontaneously increasing loan loss provision.
- Deposits in the banks are also decreasing while some banks are holding enough funds.

## **2.3 Research Gap**

The literature available on profitability is basically of joint venture and local commercial banks. The previously conducted similar researches have focused on profitability interest income and cost of fund etc. In case of commercial banks Standard Chartered was found best performer. Market value and both value scenario has given both positive and negative relationship in past thesis studies. Income to total earning assets ratio are found to be on decreasing trend on top commercial banks. Cost management strategy I found adopted by some banks.

Based on past reviews, the following research gaps are identified:

- The insurance companies, though are in considerable number are left away in the study matter.

- The profitability analysis of commercial banks has given bases for this study to be conducted on similar player of market.
- The expenses, assets, equity and use of fund with consideration to the profitability of insurance companies is equally important as they also have financial nature operation.

## **CHAPTER – III**

### **RESEARCH METHODOLOGY**

In order to start any activity preplanning of way to perform that activity is not only necessary but is also very important. It is important in the sense that it not only makes us easy to act and perform but also helps us to obtain our desired results and objectives within the specified time period. For analyzing the profitability in the context of insurance companies in Nepal we do have to determine the systematic process that we are going to use. An introduction relating to this thesis work is made in the first chapter and relevant literatures are received in the second chapter. The research methodologies, which are used to analyze to collected data, are mentioned in this chapter.

Research methodology is the systematic way to solve the research problem. This chapter highlights about the methodology adopted in the process of present study. It also focuses about sources and limitations of the data, which are used to present study. ‘Research Methodology is a way for systematic solving the research problem in the other words; research methodology indicates the methods and processes employed in the entire aspects of the study. “Research Methodology refers to the various sequential steps (along with a rationale, if each such step) to be adopted by a researcher in studying a problem with certain object/objects I view” (Kothari; 1990; 39).

This chapter incorporates Research design, Nature and Sources of Data, Population and Sample, Data collection procedure and lastly, Methods of Analysis. This chapter offers the methods of investigation followed by the objective of the case study; also states the sources and limitations of the data used in the study. So, it is the methods, steps, and guidelines, which are to be followed in analysis, and it is a way presenting the collected data with meaningful analysis.

### **3.1 Research Design**

The word “Research” is derived from French word “Researcher” which means to seek again. Therefore to seek and compare the concerned bans for the case study, the research is designed as per objective of the study.

“Research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The plan is the overall scheme or program of the research. It includes an outline of what the investors will do from writing the hypothesis and their operational implications to the final analysis of data. The structure of the research is more specific. It is the outline, the scheme, the paradigm of the operation of the variables. Then we draw diagrams that outline the variables and their relation and juxtaposition, we build structural schemes for accomplishing operational research purposes. Strategy, as used here, is also more specific than plan. In other words, strategy implies how the research objectives will be reached and how the problem encountered in the research will be tackled.” (Kerlinger; 1986; 275) But if we are to describe in one sentence it is purely and simply the framework of plan for a study that guides the collection and analysis of the data.

The research design is of both descriptive and prescriptive nature. Descriptive research is used to compare and to assess the options, behaviors of the firms and describe the situation and events occurring during the study period where analytical research is used to find out the result employing financial as well as statistical tools. For the analytical purpose, the annual reports published by the relative companies and other publications of the related institutions published by the banks respectively and Nepal Rastra Bank, Nepal stock Exchange Ltd, Beema Sameeti & other agencies, were collected for the year 2006 to 2010. In this study both descriptive and analytical research design is used.

### **3.2 Nature and Sources of Data**

The study is based secondary data as well as primary. The secondary data is collected from annual reports, profit and loss accounts, balance sheets, brochures, journals and articles published in various magazines, newspapers and other internal reports and publications of the sample insurance companies and other institutions. Besides it other

necessary information that is concerned to the topic are also gathered from different websites, related companies and related agencies like Rastriya Beema Sansthan, Nepal Stock Exchange limited, Ministry of Finance, National Planning Commission etc. Primary data is collected in the form of interview, questionnaire and in other forms.

### **3.3 Data Processing Procedures**

For the purpose of this study, the different data are obtained from different sources, which are scanned and tabulated under different heads. After tabulation, they are analyzed by applying both financial and statistical tools.

### **3.4 Population and Sample Size**

According to the statistics of Rastriya Beema Samiti, there are 25 insurance companies operating under its approval. Out of these only two companies- Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd. are selected as sample for the study. NLIC is selected from the group of pure Nepalese investment insurance company and LIC is taken from the group of joint venture insurance companies. It covers 10.52% of the total population.

### **3.5 Period of the Study**

The study is based on five years financial data of sample insurance Companies i.e. Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd. starting from fiscal year 2061/62 BS (year ending mid July 2006) to fiscal year 2066/67 BS (year ending mid July 2010).

### **3.6 Method of Analysis**

Financial tools and empirical models are to be used in the process of research and study. Main focus is given to ratio analysis as it is taken as the powerful tool of financial analysis to point out the economic and financial position of business unit through which it can be x-rayed.

### 3.6.1 Statistical Tools

Statistical tools are the measures or the instruments to analyze the collected data from different sources. In statistics, there are numerous statistical tools to analyze data of various natures. In this study, the researcher has used the following statistical tools to analyze the data.

#### 3.6.1.1 Average (Mean)

An average is a single value related from a group of values to represent them in some way, a value, which is supposed to stand for whole group of which it is part, as typical of all the values in the group (Gupta: 1990; E7-2). There are various types of averages. Arithmetic mean (A.M. simple and weighted), median, mode, geometric mean, harmonic mean, are the major types of averages. The most popular and widely used measure representing the entire data by one value is the A.M. The value of the A.M. is obtained by adding together all the items and by dividing this total by the number of items or observations.

Mathematically, (Gupta; 1992: 238)

$$\text{Arithmetic Mean (A.M.) is given by, } \bar{X} = \frac{\sum X}{n}$$

Where,

$$\bar{X} = \text{Arithmetic Mean}$$

$$\sum X = \text{Sum of all the values of the variable X.}$$

$$n = \text{Number of observations}$$

#### 3.6.1.2 Standard Deviation

The standard Deviation ( $\sigma$ ) measures the absolute dispersion. The greater the standard deviation, greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observations as well as homogeneity of a series and vice versa.

Mathematically, (Gupta; 1992: 380)

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{1}{n} \sum (X - \bar{X})^2}$$

### 3.6.1.3 Coefficient of Variation

The standard deviation is absolute measures of dispersion: where as the coefficient of variation (CV) is a relative measure. To compare the variability between two or more series, CV is more appropriate statistical tool..

Mathematically, (Gupta; 1992: 380)

$$\text{Coefficient of Variation (CV)} = \frac{\sigma}{\bar{X}} \times 100$$

### 3.6.1.4 Correlation Analysis

Correlation is a statistical tool, which studies the relationship between two variables. Correlation coefficient summarized in one figure, the degree and they extend to which the two variables are correlated but is does not tell about cause and effect. (Bajracharya, 2053)

For analyzing the relationship between two variables, Karl Person's correlation coefficient (r) has been used. Correlation analysis describes the positive and negative relationship between variables. It helps to determine whether there is:

- A positive or negative relationship exists
- The relationship is significant or insignificant and
- Establish cause and effect relation if any

The statistical tool, correlation analysis is preferred in this study to identify the relationship between variables, whether the relationship is significant or not. For the purpose of decision- making, interpretation is based on following term:

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

3. When  $r = 0$ , there is no correlation
4. When 'r' lies between 0.7 to 0.999 (-0.7 to 0.999) there is a high degree of positive (or negative) correlation.
5. When 'r' lies between 0.5 to 0.699, there is moderate degree of correlation.
6. When 'r' is less than 0.5, there is low degree of correlation.

### **3.6.1.5 Trend Analysis**

Trend analysis is a significant tool of horizontal financial analysis. It is a dynamic method to indicate the changes in terms of financial statement. Trend analysis helps to identify the controllable items of given period and future forecast can be made for ongoing concern. It is one of the useful tools in making a comparative study of the financial statement of the number of years. It makes easy to identify the changes in an item or in a group of items over a period of time and to draw the conclusion regarding the changes there on.

Under this topic, trend of different ratios are forecasted for next five years. The projections are based on the following assumptions.

- The main assumption is that other things will remain unchanged.
- The companies will remain in the present position.
- The economy will remain in the present stage.
- Beema Samiti will not change its guidelines to insurance companies.
- The forecast will be true only when the limitation of least square method is carried out.

#### **Least square method:**

This is one of the most commonly used methods to describe the trend. This is the mathematical method.

The straight line trend between the dependent variable 'y' and independent variable 'x' (i.e. time) is representing by equation:

$$Y_c = a + bx$$

Where,

$Y_c$  = estimated value of 'y' for any given value of independent variable X.

a = y – intercept of value of 'y' when x = 0 [i.e.  $a = \frac{\sum Y}{n}$  ]

b= slope of the trend line or amount of change in 'y' per unit change in x

[i.e.  $b = \frac{\sum XY}{\sum X^2}$  ]

### **3.6.2 Financial Tools**

In the research different financial tools are used to find, examine not only the financial strength but also the weakness of the companies. In the study financial tools like ratio and analysis has been used. These tools are very helpful to find symptoms of the firm.

#### **3.6.2.1 Ratio Analysis**

Ratio analysis is one of the most powerful tools for analyzing the financial performance of any firm. Since many diverse groups of people are interested in analyzing the financial information to indicate the operating and financial efficiency and growth of the firm. These people use ratio to determine those financial characteristics of the firm in which they are interested. “In the financial analysis, ratio analysis is used for evaluating the financial position and performance of the firm.” (Pandey; 1993; 104)

In this analysis detail analysis on return, expenses, income related ratios have been made in order to find out the true picture of profitability of the sample insurance companies. Profitability analysis would be incomplete if these above aspects are not taken into consideration.

##### **1) Return Analysis**

###### **a) Return on Total Assets**

Return on Assets ratio measures the percentage of net profit on total assets employed to the firm. This ratio is obtained by dividing the net profit by total assets.

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100$$

**b) Return on Equity Ratio**

Return on Equity Ratio shows the percentage of Net profit on total Equity. This ratio is measured by dividing the Net profit by total equity amount.

$$\text{Return on Equity Ratio} = \frac{\text{Net Profit}}{\text{Total Equity}} \times 100$$

**c) Return on Earning Assets Ratio**

Return on Earning Assets ratio measures the percentage of net profit on total earning assets employed to the firm. This ratio is obtained by dividing the net profit by total earning assets.

$$\text{Return on Earning Assets} = \frac{\text{Net Profit}}{\text{Total Earning Assets}} \times 100$$

**d) Net Profit to Life Insurance Fund Ratio**

Net Profit to Life Insurance Fund Ratio measures the percentage of net profit on life insurance fund employed to the firm. This ratio is obtained by dividing the net profit by life insurance.

$$\text{Net Profit on Life Insurance Fund Ratio} = \frac{\text{Net Profit}}{\text{Life Insurance Fund}} \times 100$$

**2) Income Analysis**

**a) Interest Income to Total Income Ratio**

Interest Income to Total Income Ratio measures the percentage of Interest income on total income earned to the firm. This ratio is obtained by dividing the interest income by total income.

$$\text{Interest Income to Total Income Ratio} = \frac{\text{Interest Income}}{\text{Total Income}} \times 100$$

**b) Interest Income to Total Assets Ratio**

Interest Income to Total Assets Ratio measures the percentage of Interest income on total assets employed to the firm. This ratio is obtained by dividing the interest income by total assets.

$$\text{Interest Income to Total Assets Ratio} = \frac{\text{Interest Income}}{\text{Total Assets}} \times 100$$

**c) Interest Income to Total Earning Assets Ratio**

Interest Income to Total Earning Assets Ratio measures the percentage of Interest income on total earning assets employed to the firm. This ratio is obtained by dividing the interest income by total earning assets.

$$\text{Interest Income to Earning Assets Ratio} = \frac{\text{Interest Income}}{\text{Earning Assets}} \times 100$$

**3) Expenses Analysis**

**a) Salary and Allowance Expenses to Total Managerial Expenses Ratio**

Salary and allowance expenses to total managerial expenses ratio measures the percentage of salary and allowance expenses on total managerial expenses of the firm. This ratio is obtained by dividing the salary and allowance expenses by total managerial expenses.

$$\frac{\text{Salary and allowance Expenses to Total Managerial Expenses Ratio}}{\text{Total Managerial Expenses Ratio}} = \frac{\text{Salary and allowance expenses}}{\text{Total management expenses}} \times 100$$

### **b) Office Expenses to Total Managerial Expenses Ratio**

Office expenses to total managerial expenses ratio measures the percentage of office expenses on total managerial expenses of the firm. This ratio is obtained by dividing the office expenses by total managerial expenses.

Office Expenses to Total Managerial Expenses Ratio

$$= \frac{\text{Office Expenses}}{\text{Total managerial Expenses}} \times 100$$

## **CHAPTER – IV**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 Financial Ratio Analysis**

Financial Ratio Analysis is a tool, through which economic and financial position of organization can be fully to X-rayed. It is the indicated quotient of two mathematical expressions, and as the relationship between two or more indicators. Therefore, to find out the position of profitability in securities of sample insurance institutions, the following ratios are examined.

##### **4.1.1 Return Analysis**

Under this heading, an attempt has been made to analyze the ratio of return on total assets, total earning assets, total equity capital and life insurance fund. The insurance companies under study have not separated the profit from life insurance fund; however the analysis has been made according to the profit calculated for income tax purposes.

##### **4.1.1.1 Return on Assets Ratio**

Return on Assets ratio measures the percentage of net profit on total assets employed to the firm. This ratio is obtained by dividing the net profit by total assets. The statistical formula to calculate Return on Assets is given as:

$$\text{Return on Assets Ratio} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100$$

The Comparative analysis of Return on assets ratio of the companies under study is shown in the following table.

Table: 4.1  
**Return on Assets Ratio**

(Rs. in Lakh)

Year	NLIC			LIC		
	Net Profit	Total Assets	Ratio (%)	Net Profit	Total Assets	Ratio (%)
2006	463	18686	2.48	447	18623	2.40
2007	0	25131	0.00	510	23017	2.22
2008	42	31973	0.13	51	28961	0.18
2009	80	44333	0.18	871	40565	2.15
2010	63	52914	0.12	-63	53524	-0.12
<b>Mean</b>			<b>0.58</b>			<b>1.36</b>
<b>SD</b>			<b>0.95</b>			<b>1.10</b>
<b>CV</b>			<b>1.63</b>			<b>0.80</b>

(Source: Annual reports of NLIC and LIC)

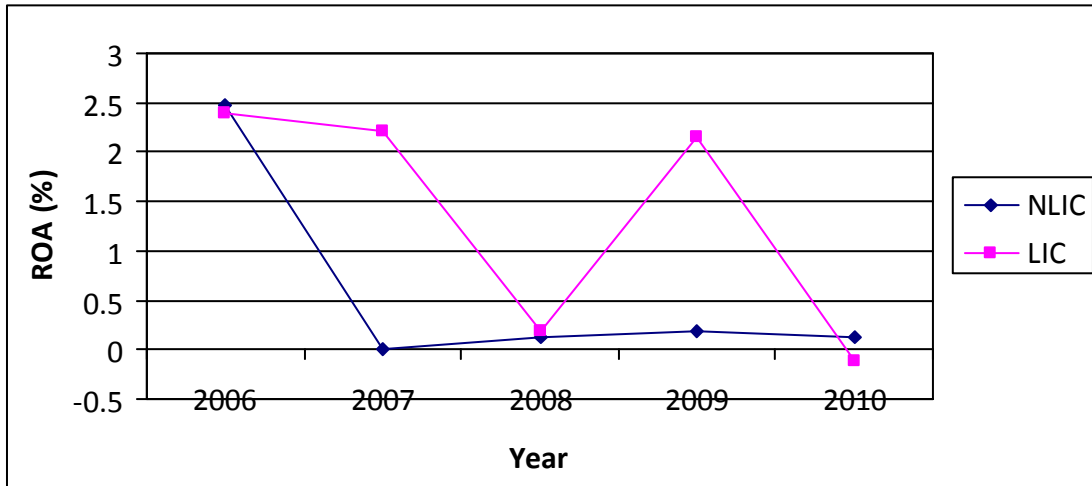
From the above table: 4.1, the Return on Assets of NLIC and LIC has shown. The amount of Total Assets and its trend to increment seems same of both organizations. But, the trend of Net Profit, NLIC has got a high profit on 2006 as Rs.463 Lakh on 2006 and decreases to Rs.0 on the second study period and after that it has an increasing trend for the next two years. But the trend of Net Profit of LIC is haphazardly. In the year 2006 and 2007 it seems increasing but in the year 2008 Net Profit has reduced to Rs.51 Lakhs from Rs.510 Lakhs of 2007 and again it increases to Rs.871 Lakhs in the year 2009 and again at 2010 it goes negative of Rs.63 Lakhs.

The Return on Assets Ratio of NLIC seems more constant than LIC. The ROA of NLIC for the first study year was 2.48% and it gone to 0 on the year 2007 and got an increasing trend from that year to the last study year. The ROA of NLIC for 2010 goes to 0.12%. Whereas, ROA of LIC seems haphazard trend. It was 2.40% for the year 2006 and came down for next two years and it was 0.18% for the year 2008. It increases to 2.15 on 2009 and again decreases to -0.12% for last year. Although the trend of ROA of NLIC goes increasing except the first study period, average of ROA of LIC is higher than NLIC. Deviation of NLIC seems higher than LIC.

The trend of ROA of both companies is shown in below figure::

Figure 4.1

### Return on Assets Ratio



The figure shows the trend of both companies ROA. In the first study year ROA of both companies seems same. In Second year, NLIC goes down to 0 but LIC decreases by tinny value. From second year to the last year NLIC has on increasing trend but LIC has fluctuation on its value and goes Negative ratio for the last year.

#### 4.1.1.2 Return on Equity Ratio

Return on Equity Ratio gives the percentage of Net profit on total Equity. This ratio is measured by dividing the Net profit by total equity amount. Technically it can be shown as:

$$\text{Return on Equity Ratio} = \frac{\text{Net Profit}}{\text{Total Equity}} \times 100$$

Comparative analysis of Return on equity ratio of NLIC and LIC is presented in the following table: 4.2.

Table: 4.2  
Return on Equity Ratio

(Rs. in Lakh)

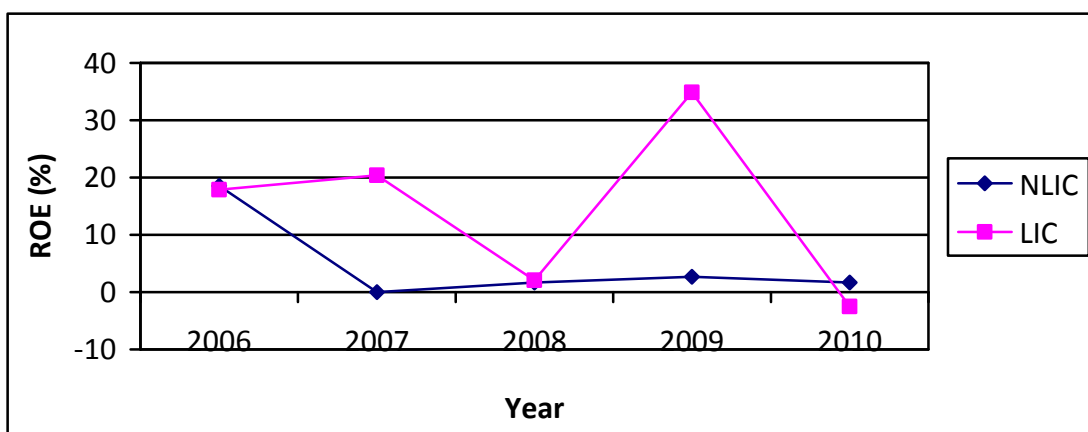
Year	NLIC			LIC		
	Net Profit	Total Equity	Ratio (%)	Net Profit	Total Equity	Ratio (%)
2006	463	2500	18.52	447	2500	17.88
2007	0	2500	0.00	510	2500	20.40
2008	42	2500	1.68	51	2500	2.04
2009	80	3000	2.67	871	2500	34.84
2010	63	3750	1.68	-63	2500	-2.52
Mean			<b>4.91</b>			<b>14.53</b>
SD			<b>6.86</b>			<b>13.45</b>
CV			<b>1.40</b>			<b>0.93</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.2, it is found that the return on equity ratio of NLIC is 6.86 percent on average. NLIC has neither profit nor loss in the year 2007. The maximum ratio in 18.52 percent in 2006 and minimum ratio is 0.00 % in the year 2007. Similarly average return on equity ratio of LIC is 14.53 percent. The highest ratio is 34.84 percent in the year 2009, while the minimum ratio is -2.52% in 2010. Comparatively the ratios of NLIC is more scattered than LIC. Which describes by CV of both companies. Both companies has no more satisfied trend of ROE Ratio.

Following figure: 4.2 helps to show these facts more clearly:

Figure: 4.2  
Return on Equity Ratio



### 4.1.1.3 Return on Earning Assets Ratio

Return on Earning Assets ratio measures the percentage of net profit on total earning assets employed to the firm. This ratio is obtained by dividing the net profit by total earning assets.

$$\text{Return on Earning Assets} = \frac{\text{Net Profit}}{\text{Total Earning Assets}} \times 100$$

Comparative analysis of Return on earning assets ratio of the companies under study is shown in the following table: 4.3.

Table: 4.3  
Return on Earning Assets Ratio

(Rs. in Lakh)

Year	NLIC			LIC		
	Net Profit	Earning Assets	Ratio (%)	Net Profit	Earning Assets	Ratio (%)
2006	463	18572	2.49	447	19876	2.25
2007	0	23180	0.00	510	21441	2.38
2008	42	27555	0.15	51	26892	0.19
2009	80	38834	0.21	871	37785	2.31
2010	63	54942	0.11	-63	49685	-0.13
<b>Mean</b>			<b>0.59</b>			<b>1.40</b>
<b>SD</b>			<b>0.95</b>			<b>1.12</b>
<b>CV</b>			<b>1.61</b>			<b>0.80</b>

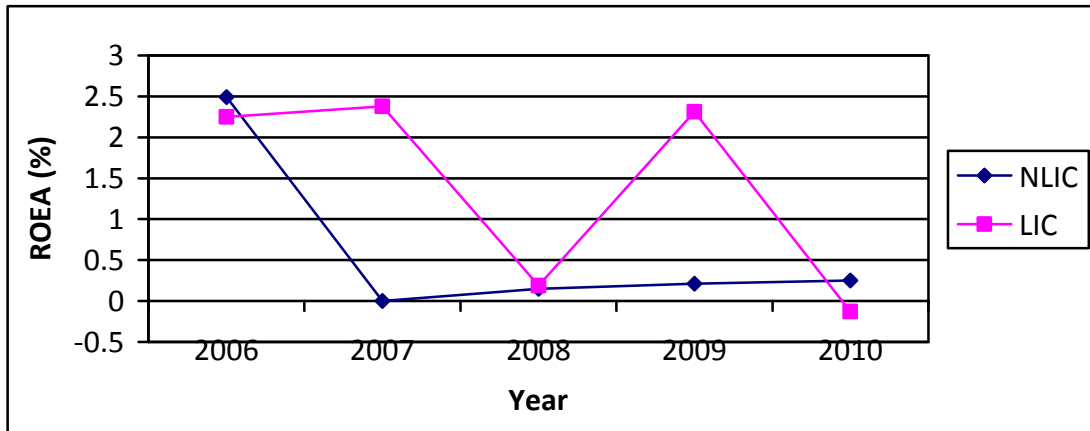
(Source: Annual reports of NLIC and LIC)

From the table: 4.3, we can see the trend of net profit and earning assets of both companies. It is found that the average return on earning assets ratio of NLIC is 0.59 percent. The lowest ratio on the year 2007 was 0.00. Meantime, NLIC has got highest return on earning assets on 2006 which was 2.49%. Moreover LIC has average return earnings ratio was 1.40 for the study period. It has 2.38 ROEA ratio in the year 2007 and gone to negative by -0.13 in 2010. NLIC has on increasing trend except the first year meantime LIC has more fluctuated trend on its ratio. The standard deviation on ratios of LIC has got higher although it has lower CV rather than NLIC.

The ROEA ratio of both companies has plotted in Figure: 4.3:

Figure: 4.3

### Return on Earning Asset Ratio



From the above figure we can more clarify the trend of ROEA of both companies. The trend of ROEA of NLIC is higher for the first year and gone down to 0 in second year. After the year two it is getting improvement in each year by a small value. Meantime, the ratio of LIC is highest in second year. It has satisfactory ratio for first, second and fourth year. But it has minimum return on third year and gone to negative for last study year. Both companies need to make constant increasing trend by analyzing the effective factors.

#### 4.1.1.4 Net Profit to Life Insurance Fund Ratio

Net Profit to Life Insurance Fund Ratio measures the percentage of net profit on life insurance fund employed to the firm. Since the companies under study have not separated the profit from their life insurance fund, this ratio is very significant to understand the percentage of net profit. This ratio is obtained by dividing the net profit by life insurance.

$$\text{Net Profit on Life Insurance Fund Ratio} = \frac{\text{Net Profit}}{\text{Life Insurance Fund}} \times 100$$

Comparative analysis of Net Profit on Life Insurance Fund ratio of the companies under study is shown in the following table: 4.4.

Table: 4.4  
**Net Profit to Life Insurance Fund Ratio**

(Rs. in Lakh)

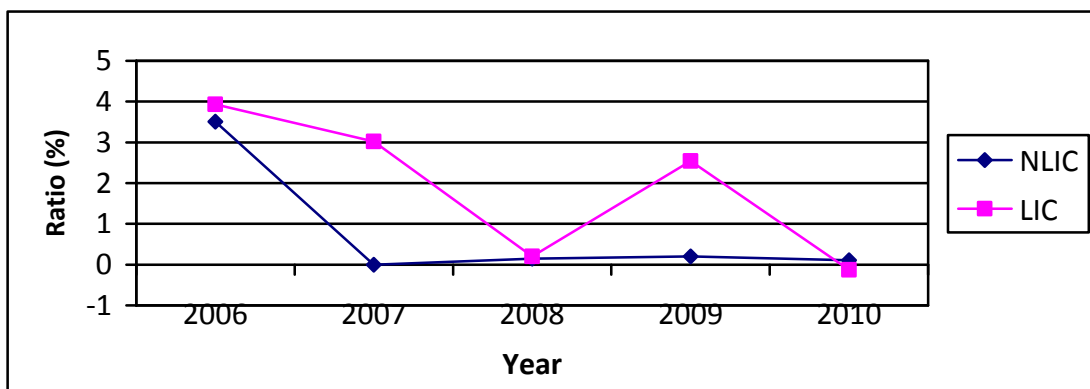
Year	NLIC			LIC		
	Net Profit	Life Insurance Fund	Ratio (%)	Net Profit	Life Insurance Fund	Ratio (%)
2006	463	13176	3.51	447	11368	3.93
2007	0	19718	0.00	510	16889	3.02
2008	42	27615	0.15	51	24923	0.20
2009	80	39322	0.20	871	34256	2.54
2010	63	55253	0.11	-63	48139	-0.13
Mean			<b>0.80</b>			<b>1.91</b>
SD			<b>1.36</b>			<b>1.60</b>
CV			<b>1.71</b>			<b>0.84</b>

(Source: Annual reports of NLIC and LIC)

Table 4.4 shows the clear figure of net profit and LIC fund and its ratio of both insurance companies. Regarding the NPLIF ratio, NLIC has a highest ratio on 2006 as 3.51. It gone to 0 on 2007 and increased to 0.20 for 2009 and again decreased at 0.11 on 2010. The LIC has 3.93 on 2006 and gone 3.02 and 0.20 for second and third year respectively. It improved it ratio on 2009 and decreased to -0.13 for last study year. The average ratio for the study period is 0.80 and 1.91 for NLIC and LIC respectively. It has 1.36 and 1.60 standard deviation and 1.71 and 0.84 correlation of variance respectively.

Figure: 4.4

**Net Profit to Life Insurance Fund Ratio**



With the help of figure: 4.4, we can analysis the trend of net profit to life insurance fund ratio for five study period has shown clearly. The trend of this ratio of NLIC is

seems same as earlier ratios like first year very high and then decreases to zero and is slightly increasing every year. Meantime, LIC has got higher trend in first two years and gone down nearby zero on third year and again increases to fourth year and gone to negative on last year.

#### 4.1.2 Income Analysis

Income is the main factor, which affect the profitability significantly. In this section, an attempt has been made to analyze the various ratios regarding the income of the insurance companies under study.

##### 4.1.2.1 Interest Income to Total Income Ratio

Interest Income to Total Income Ratio measures the percentage of Interest income on total income earned to the firm. This ratio is obtained by dividing the interest income by total income.

$$\text{Interest Income to Total Income Ratio} = \frac{\text{Interest Income}}{\text{Total Income}} \times 100$$

Comparative analysis of Interest Income to Total Income Ratio of the companies under study is shown in the following table.

Table: 4.5  
**Interest Income to Total Income Ratio**

(Rs. in Lakh)

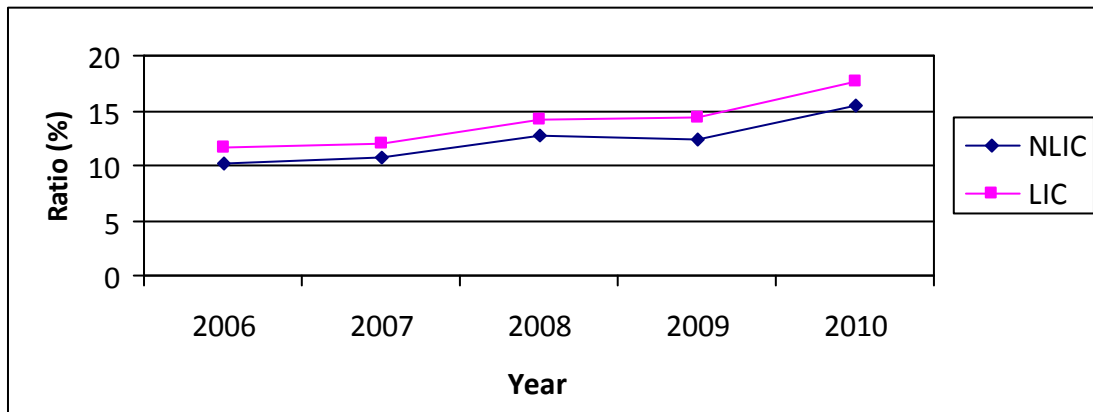
Year	NLIC			LIC		
	Interest Income	Total Income	Ratio (%)	Interest Income	Total Income	Ratio (%)
2006	673	6596	10.20	887	7656	11.59
2007	950	8882	10.70	985	8251	11.94
2008	1421	11150	12.74	1488	10493	14.18
2009	2056	16655	12.34	2027	14125	14.35
2010	3631	23435	15.49	3340	18850	17.72
Mean			<b>12.30</b>			<b>13.95</b>
SD			<b>1.86</b>			<b>2.19</b>
CV			<b>0.15</b>			<b>0.16</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.5, it is depicted that Interest Income to Total Income Ratio of NLIC is 12.30 percent on average. The maximum ratio is 15.49 percent in the year 2010 and the minimum ratio is 10.20 percent in the year 2006. The ratios are in increasing trend. Similarly average Interest Income to Total Income Ratio of LIC is 13.95 percent. The highest ratio is 17.72 percent in the year 2010, while the minimum ratio is 11.59 % in the year 2006. The ratio of LIC is also in increasing trend. Comparatively the ratios of NLIC are more homogeneous than LIC, which is shown by lower CV and SD of the NLIC. Following figure: 4.5 helps to presents these facts more clearly.

Figure: 4.5

### Interest Income to Total Income Ratio



The above figure shows that interest income to total income ratio of both companies are similar in nature. But LIC ratio is leading to NLIC. Two companies trend is in increasing and going paralleled throughout the study period.

#### 4.1.2.2 Interest Income to Total Assets Ratio

Interest Income to Total Assets Ratio measures the percentage of Interest income on total assets employed to the firm. This ratio is obtained by dividing the interest income by total assets.

$$\text{Interest Income to Total Assets Ratio} = \frac{\text{Interest Income}}{\text{Total Assets}} \times 100$$

Comparative analysis of Interest Income to Total Assets Ratio of the companies under study is shown in the following table: 4.6.

Table: 4.6  
**Interest Income to Total Assets Ratio**

(Rs. in Lakh)

Year	NLIC			LIC		
	Interest Income	Total Assets	Ratio (%)	Interest Income	Total Assets	Ratio (%)
2006	673	18686	3.60	887	18623	4.76
2007	950	25131	3.78	985	23017	4.28
2008	1421	31973	4.44	1488	28961	5.14
2009	2056	44333	4.64	2027	40565	5.00
2010	3631	52914	6.86	3340	53524	6.24
Mean			<b>4.67</b>			<b>5.08</b>
SD			<b>1.17</b>			<b>0.65</b>
CV			<b>0.25</b>			<b>0.13</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.6, it is depicted that Interest Income to Total Assets Ratio of NLIC is 4.67 percent on average. The maximum ratio is 6.82 percent in the year 2010 and the minimum ratio is 3.60 percent in the year 2006. Similarly average Interest Income to Total Assets Ratio of LIC is 5.08 percent. The highest ratio is 6.24 percent in the year 2010, while the minimum ratio is 4.28 % in the year 2007. Comparatively the ratios of LIC are more dispersed than NLIC, which is shown by greater CV and SD of the NLIC.

With the help of figure: 4.6, these facts are seen more clearly.

Figure: 4.6  
**Interest Income to Total Assets Ratio**

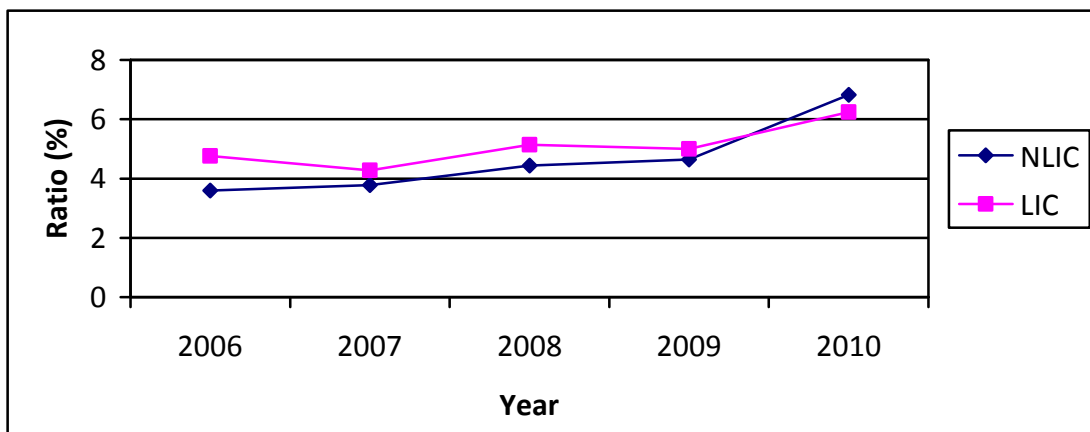


Figure 4.6 shows the relation of interest income to total assets ratio of NLIC and LIC. NLIC has a constant increasing trend for first four year and it seems increase in ratio by final year whereas LIC company ratio was decreased for second and fourth year and slightly increased in 2010. But as figure shown, the trend of NLIC is going better than LIC and LIC has lead for first four year and on last year NLIC lead on interest income to total assets. On average analysis, NLIC interest income to total assets ratio rather than LIC has going to improve since its trend is higher.

### 4.1.2.3 Interest Income to Total Earning Assets Ratio

Interest Income to Total Earning Assets Ratio measures the percentage of Interest income on total earning assets employed to the firm. This ratio is obtained by dividing the interest income by total earning assets.

$$\text{Interest Income to Total Earning Assets Ratio} = \frac{\text{Interest Income}}{\text{Total Earning Assets}} \times 100$$

Comparative analysis of Interest Income to Total Earning Assets Ratio of the companies under study is shown in the following table: 4.7.

Table: 4.7  
Interest Income to Total Earning Ratio

(Rs. in Lakh)

Year	NLIC			LIC		
	Interest Income	Earning Assets	Ratio (%)	Interest Income	Earning Assets	Ratio (%)
2006	673	18572	3.62	887	19876	4.46
2007	950	23180	4.10	985	21441	4.59
2008	1421	27555	5.16	1488	26892	5.53
2009	2056	38834	5.29	2027	37785	5.36
2010	3631	54942	6.61	3340	49685	6.72
<b>Mean</b>			<b>4.96</b>			<b>5.34</b>
<b>SD</b>			<b>1.04</b>			<b>0.81</b>
<b>CV</b>			<b>0.21</b>			<b>0.15</b>

(Source: Annual reports of NLIC and LIC)

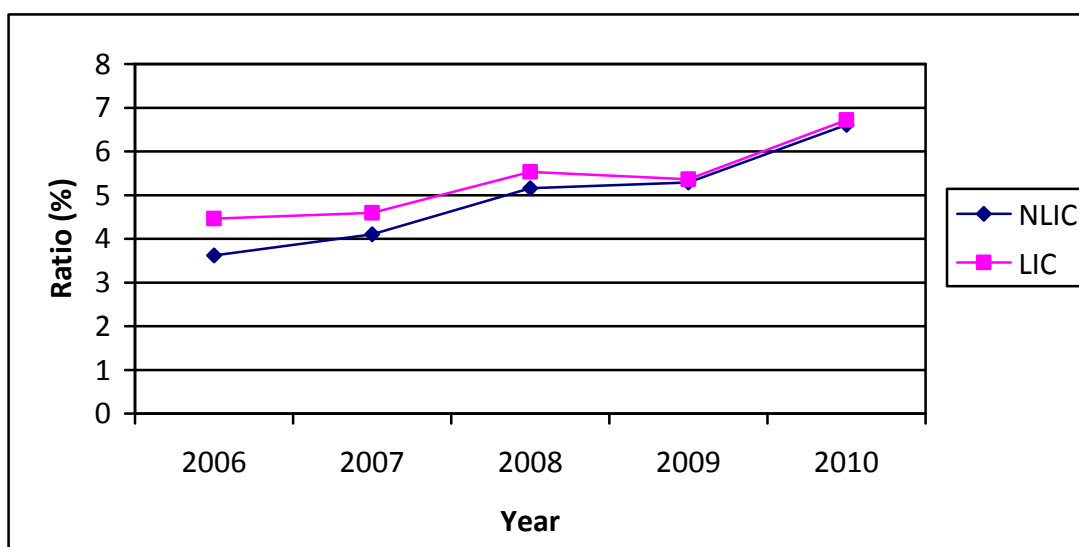
The Table 4.7 shows the interest income to total earning assets ratio of NLIC and LIC. Throughout the five year study period the average ratio of NLIC and LIC were 4.96 and 5.34 respectively. The standard deviation and coefficient variance of data has found 1.04 and 0.81 and 0.21 and 6.59 respectively. It shows that the average

income on total earning of LIC is greater than NLIC. Data of NLIC is in the trend of increasing whereas LIC has some stability on the trend. It also describes by the CV of both companies.

Below figure: 4.7 has been plotted to simplify the above values:

Figure: 4.7

### Interest Income to Total Earning Assets Ratio



Above figure shows the relation of interest income and total earnings ratio of NLIC and LIC companies. Both companies has got positive increasing trend on their interest income. For the first four years LIC has leading on the ratio whereas in the last year NLIC has got more. LIC has slightly less increasing trend than NLIC. We may suggest both companies to keep the increasing tend and try to increase the ratio.

### 4.1.3 Expenses Analysis

section, an attempt has been made to analyze the various ratios regarding the expenses of the insurance companies under study.

### 4.1.3.1 Salary and Allowance Expenses to Total Managerial Expenses Ratio

Salary and allowance expenses to total managerial expenses ratio measures the percentage of salary and allowance expenses on total managerial expenses of the firm. This ratio is obtained by dividing the salary and allowance expenses by total managerial expenses.

Salary and allowance Expenses to Total Managerial Expenses Ratio=

$$\frac{\text{Salary and Allowance Expenses}}{\text{Total managerial Expenses}} \times 100$$

Comparative analysis of salary and allowance expenses to total managerial expenses ratio of Nepal Life Insurance Company Limited and Life Insurance Corporation Nepal Limited under study period of 2006 to 2010 is shown in the following table: 4.8.

Table: 4.8

#### Salary and Allowance Expenses to Total Management Expenses Ratio

(Rs. in Lakh)

Year	NLIC			LIC		
	Salary & Allowance	Total Managerial Exp	Ratio	Salary & Allowance	Total Managerial Exp	Ratio
2006	95	433	21.94	94	444	21.17
2007	109	517	21.08	109	589	18.51
2008	173	792	21.84	147	538	27.32
2009	253	1233	20.52	156	1029	15.16
2010	467	2519	18.54	220	1470	14.97
<b>Mean</b>			<b>20.78</b>			<b>19.43</b>
<b>SD</b>			<b>1.24</b>			<b>4.57</b>
<b>CV</b>			<b>0.06</b>			<b>0.24</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.8, it is found that salary and allowance expenses to total managerial expenses ratio of NLIC is 20.78 percent on average. The maximum ratio is 21.94 percent in the year 2006 and the minimum ratio is 18.54 percent in the year 2010. Similarly average salary and allowance expenses to total managerial expenses ratio of

LIC is 19.43 percent. The highest ratio is 27.32 percent in the year 2008, while the minimum ratio is 14.97 % in the year 2010. Comparatively the ratios of NLIC are more consistent than LIC, which is shown by lower CV and SD of the NLIC. These facts are presented in Figure: 4.8.

Figure: 4.8

**Salary and Allowance Expenses to Total Managerial Expenses Ratio**

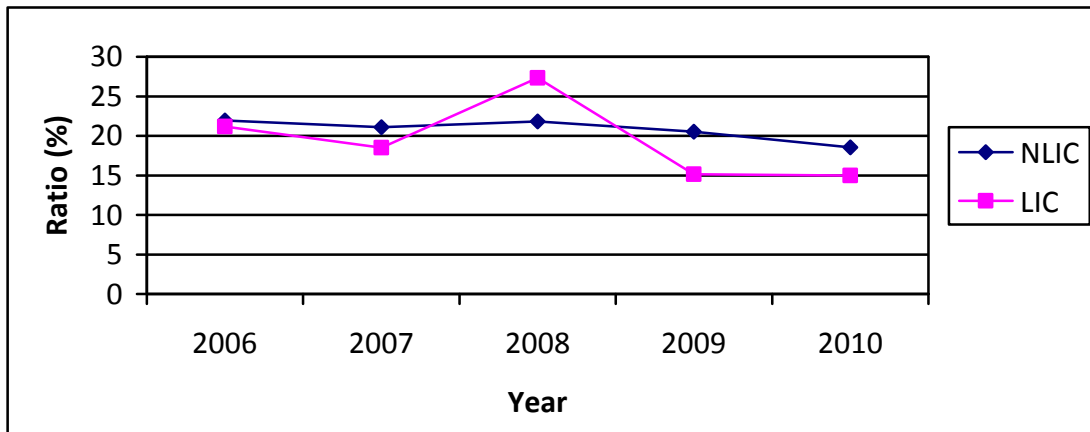


Figure 4.8 shows the salary and salary expenses trend with total management expenses ratio. The trend of both companies are decreasing but NLIC has some constant decreasing trend whereas LIC has not similarity on its expenses. It is better to decrease the trend of both companies and LIC need to make a constant decreasing trend.

**4.1.3.2 Office Expenses to Total Managerial Expenses Ratio**

Office expenses to total managerial expenses ratio measures the percentage of office expenses on total managerial expenses of the firm. This ratio is obtained by dividing the office expenses by total managerial expenses.

Office Expenses to Total Managerial Expenses Ratio:

$$= \frac{\text{Office Expenses}}{\text{Total managerial Expenses}} \times 100$$

Comparative analysis of office expenses to total managerial expenses ratio of the companies under study is shown in the following table: 4.9.

Table: 4.9  
**Office Expenses to Total Managerial Expenses Ratio**

(Rs. in Lakh)

Year	NLIC			LIC		
	Office Expenses	Total Managerial Exp	Ratio	Office Expenses	Total Managerial Exp	Ratio
2006	40	433	9.24	39	444	8.78
2007	45	517	8.70	46	589	7.81
2008	88	792	11.11	59	538	10.97
2009	121	1233	9.81	90	1029	8.75
2010	149	2519	5.92	130	1470	8.84
Mean			<b>8.96</b>			<b>9.03</b>
SD			<b>1.72</b>			<b>1.04</b>
CV			<b>0.19</b>			<b>0.12</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.9, it is found that office expenses to total managerial expenses ratio of NLIC is 8.96 percent on average. The maximum ratio is 11.11 percent in the mid year 2008 and the minimum ratio is 8.70 percent in the year 2007. Similarly average office expenses to total managerial expenses ratio of LIC is 9.03 percent. The highest ratio is 10.97 percent in the year 2008, while the minimum ratio is 7.81 % in the year 2007. Ratios of the both companies are in decreasing trend. Comparatively the ratios of NLIC are more consistent than LIC, which is shown by lower CV of the NLIC. Figure: 4.9 is representing the value clearly.

Figure: 4.9

**Office Expenses to Total Managerial Expenses Ratio**

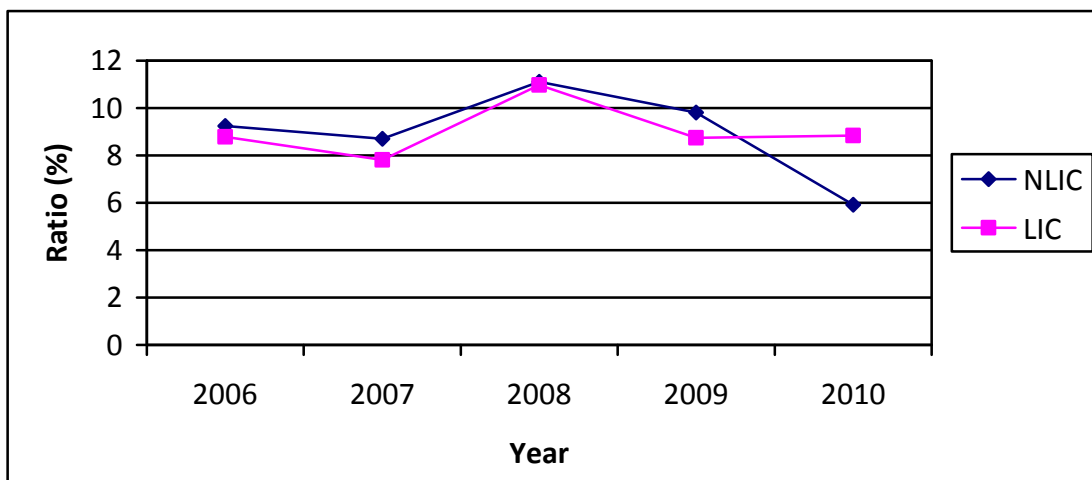


Figure 4.9 shows that the office expenses to total management expenses ratio of both companies are similar in nature. The ratio is increased in 2008 and on decreasing trend for whole study period.

## **4.2 Least Square Linear Trend Analyses**

Trend analysis has been a very useful and commonly applied statistical tool to estimate the future events in quantitative terms. On the basis of tendencies in the dependent variables in the past periods record, the future trend is predicted. This analysis takes the historical data as the basis for forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variable are repeated in the future, i.e. the past events affect the future events significantly.

The future trend is forecasted by using the following formula given below:

$$Y_c = a + bx$$

Where,

$Y_c$  = the dependent variable

$a$  = the origin i.e. arithmetic mean.

$b$  = the slope coefficient i.e. rate of change

$x$  = the independent variable i.e. year

### **4.2.1 Trend Analysis of Return on Assets Ratio**

Under this topic, an effort has been made to calculate the trend value of return on total assets ratio of NLIC and LIC comparatively under five years study period and project the trend for next three years.

The table: 4.10 presents the trend values trend value of return on total assets ratio.

Table: 4.10  
**Trend Value of Return on Assets Ratio**

Year	NLIC	LIC
2006	2.48	2.40
2007	0.00	2.22
2008	0.13	0.18
2009	0.18	2.15
2010	0.12	-0.12
2011 (Projected)	-0.78	-0.17
2012 (Projected)	-1.23	-0.68
2013 (Projected)	-1.69	-1.19
Mean (a)	<b>0.58</b>	<b>1.36</b>
Rate of Change (b)	<b>-0.45</b>	<b>-0.51</b>
Trend Equation	<b>0.58+(-0.45)x</b>	<b>1.36+(-0.51)x</b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.10, it is found that the return on total assets ratio NLIC and LIC are in decreasing trend. The rate of change of LIC is much negative than NLIC. The trend of NLIC is decreasing by the ratio of -0.45%. Similarly, the trend of LIC is increasing by the ratio of -0.51%. If other things remain same, return on total assets ratio NLIC will be -0.78, -1.23 and -1.69 for the year 2011, 2012 and 2013 respectively meantime, LIC will be -0.17, -0.68 and -1.19 respectively. Trend line of return on total assets ratio of NLIC and LIC is presented in the figure: 4.10.

Figure: 4.10  
**Trend of Return on Assets Ratio**

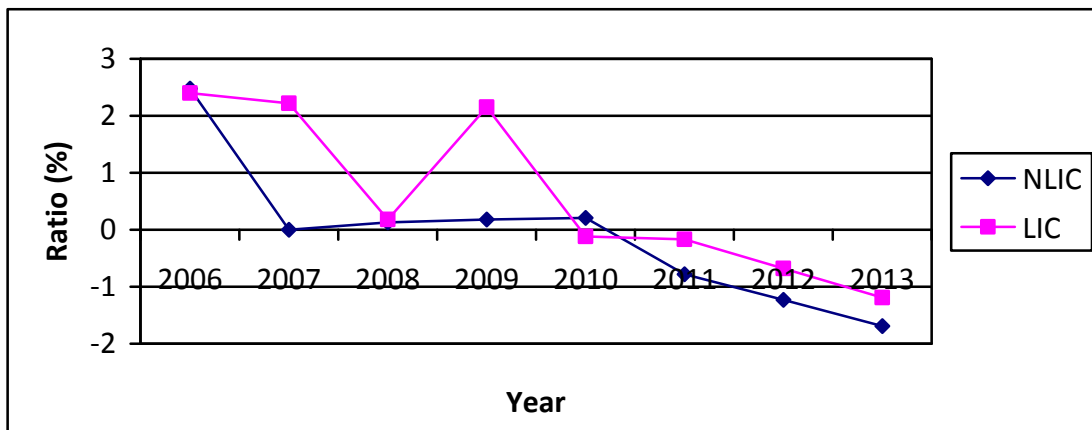


Figure 4.10 shows the trend of return on assets ratio for the study period of 2006 to 2010 and forecasting trend of 2011 to 2013. From the above picture, NLIC and LIC has almost same ratio of return on assets. But the NLIC trend has decreases to zero on second year and goes to increasing trend for other three years. But the average trend for coming year seen negative. Meantime, LIC has a fluctuate ratio and it seems very less for third year and again rise nearby two for fourth year. And it seems negative for year five. The forecasting value for 2011 to 2013 seems negative trend.

#### 4.2.2 Trend Analysis of Return on Earning Assets Ratio

Under this topic, an effort has been made to calculate the trend value of return on earning assets ratio of NLIC and LIC comparatively under five year study period and we try to project the trend for next three years by analyzing last five years ratios.

The table: 4.11 presents the trend values trend value of return on earning assets ratio.

Table: 4.11  
Trend Value of Return on Earning Assets Ratio

Year	NLIC	LIC
2006	2.49	2.25
2007	0.00	2.38
2008	0.15	0.19
2009	0.21	2.31
2010	0.11	-0.13
2011 (Projected)	-0.77	-0.05
2012 (Projected)	-1.23	-0.53
2013 (Projected)	-1.68	-1.01
Mean (a)	0.59	1.40
Rate of Change (b)	-0.46	-0.48
Trend Equation	$0.59+(-0.46)x$	$1.40+(-0.48)x$

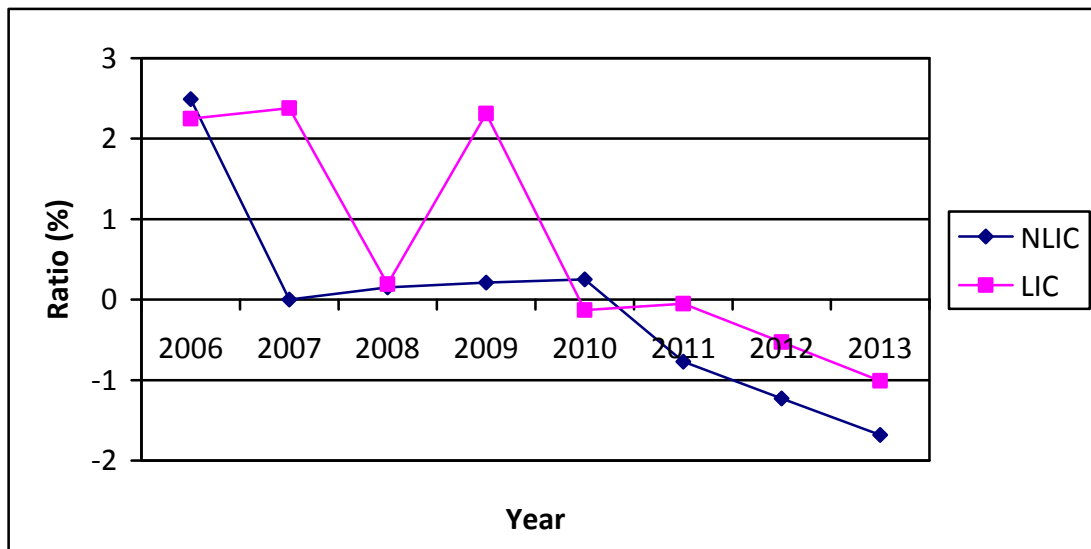
(Source: Annual reports of NLIC and LIC)

From the table: 4.11, it is found that the return on earning assets ratio NLIC and LIC are in decreasing trend. The rate of change of NLIC is less than LIC. The trend of NLIC is decreasing by the ratio of -0.46%. Similarly, the trend of LIC is increasing by the ratio of -0.48%. If other things remain same, return on earning assets ratio NLIC and LIC will be -1.68% and -1.01% respectively in the year 2013.

Trend line of return on total assets ratio of NLIC and LIC is presented in the figure: 4.11.

Figure: 4.11

### Trend of Return on Earning Assets Ratio



### 4.2.3 Trend Analysis of Return on Equity Ratio

Under this topic, an effort has been made to calculate the trend value of return on equity ratio of NLIC and LIC comparatively under five year study period and project the trend for next three years.

The table: 4.12 presents the trend values trend value of return on equity ratio.

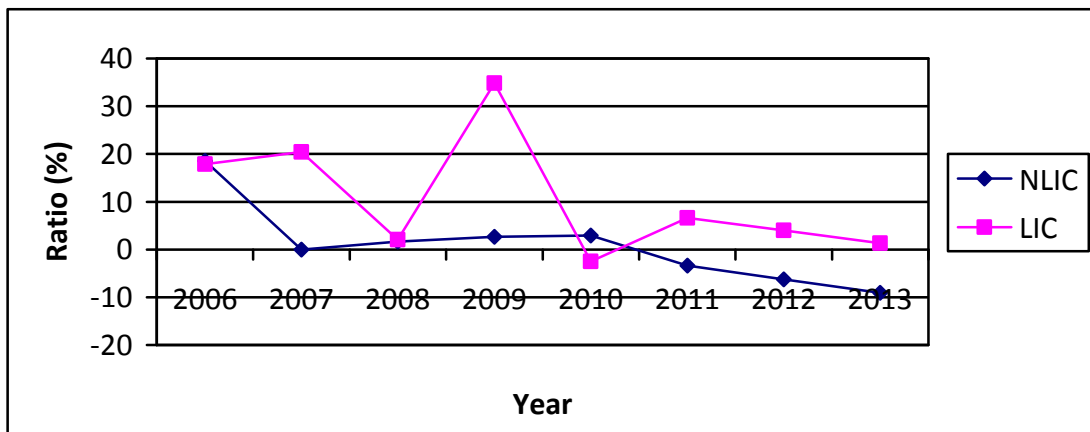
Table: 4.12  
**Trend value of Return on Equity Ratio**

Year	NLIC	LIC
2006	18.52	17.88
2007	0.00	20.40
2008	1.68	2.04
2009	2.67	34.84
2010	1.68	-2.52
2011 (Projected)	-4.39	6.62
2012 (Projected)	-7.50	3.98
2013 (Projected)	-10.60	1.35
Mean (a)	<b>4.91</b>	<b>14.53</b>
Rate of Change (b)	<b>-3.10</b>	<b>-2.64</b>
Trend Equation	<b><math>4.91+(-3.10)x</math></b>	<b><math>14.53+(-2.64)x</math></b>

(Source: Annual reports of NLIC and LIC)

From the table: 4.12, it is found that the return on equity ratio NLIC and LIC are in decreasing trend. The rate of change of NLIC is more negative than LIC. The trend of NLIC is decreasing by the ratio of -3.10. Similarly, the trend of LIC is decreasing by the ratio of -2.64. If other things remain same, return on earning assets ratio NLIC and LIC for year 2011 to 2013 will be -3.39 and 6-62, -6.23 and 3.98 and -9.08% and 1.53% respectively. To more specification for trend line of return on total assets ratio of NLIC and LIC is presented in the figure: 4.12 below:

Figure: 4.12  
**Trend of Return on Earning Assets Ratio**



#### 4.2.4 Trend Analysis of Net Profit to Life Insurance Fund Ratio

Under this topic, an effort has been made to calculate the trend value of net profit to life insurance fund ratio of NLIC and LIC comparatively under five years study period and project the trend for next three years.

The table: 4.13 presents the trend values trend value of Net Profit to Life Insurance Fund ratio of NLIC and LIC.

Table: 4.13  
Trend Value of Net Profit to Life Insurance Fund Ratio

Year	NLIC	LIC
2006	3.51	3.93
2007	0.00	3.02
2008	0.15	0.20
2009	0.20	2.54
2010	0.11	-0.13
2011 (Projected)	-1.18	-0.67
2012 (Projected)	-1.84	-1.53
2013 (Projected)	-2.50	-2.39
Mean (a)	0.80	1.91
Rate of Change (b)	-0.66	-0.86
Trend Equation	$0.80+(-0.66)x$	$1.91+(-0.86)x$

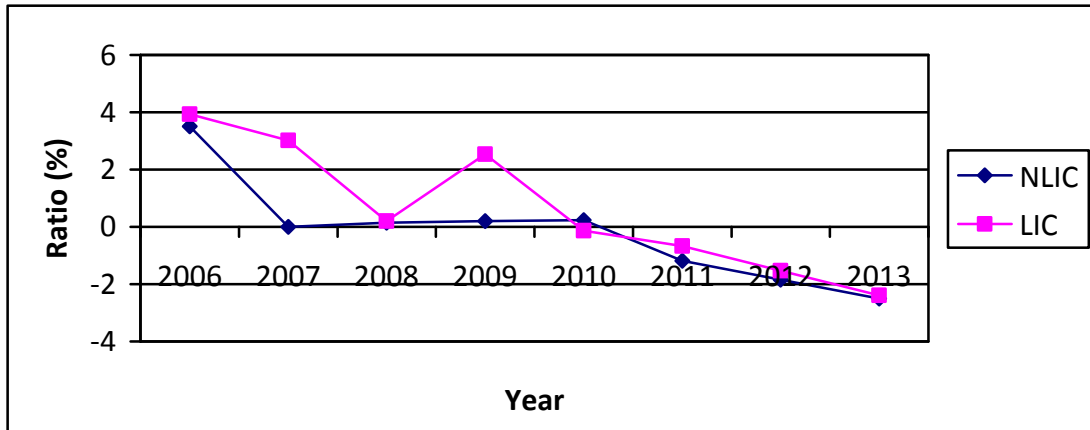
(Source: Annual reports of NLIC and LIC)

From the table: 4.13, it is found that the net profit to life insurance fund ratio NLIC and LIC are in decreasing trend. The rate of change of NLIC and LIC is homogeneous i.e. -0.66% and -0.86% respectively. If other things remain same, net profit to life insurance fund ratio of NLIC and LIC will be -2.50% and -2.39% respectively in the year 2013.

Trend line of net profit to life insurance fund ratio of NLIC and LIC is presented in the figure: 4.13.

Figure: 4.13

### Trend of Net Profit to Life Insurance Fund Ratio



### 4.3 Correlation Analysis

Correlation is a statistical tool, which shows the relationship between two variables. Correlation coefficient summarized in one figure, the degree and they extend to which the two variables are correlated or not but does not tell about cause and effect.

To analyze the relationship between two variables, Karl Person's correlation coefficient ( $r$ ) has been used. Correlation analysis describes the positive or negative relationship between variables. It also helps to determine whether there is:

- A positive or negative relationship exists
- The relationship is significant or insignificant and
- Establish cause and effect relation if any

The statistical tool, correlation analysis is preferred in this study to identify the relationship between variables, whether the relationship is significant or not. For the purpose of decision- making, interpretation is based on following:

- When  $r = 1$ , there is perfect positive correlation.
- When  $r = -1$ , there is perfect negative correlation
- When  $r = 0$ , there is no correlation

- When 'r' lies between 0.7 to 0.999 (-0.7 to -0.999) there is a high degree of positive (or negative) correlation.
- When 'r' lies between 0.5 to 0.699, there is moderate degree of correlation.
- When 'r' is less than 0.5, there is low degree of correlation.

### 4.3.1 Correlation between Net Profits and Total Assets

The coefficient of correlation between net profit and total assets is to measure the degree of relationship between these two variables. In the analysis net profit is dependent variable and a total asset is independent variable. The purpose of the computing correlation coefficient is to justify whether there is any relationship between these two variables or not. The value of correlation is shown below:

Table: 4.14  
Correlation between Net Profits and Total Assets

S.n.	Company	Correlation	Remarks
1.	NLIC	-0.526488	
2.	LIC	-0.296688	

*(See Appendix: II for Calculation)*

From the computation of correlation between the two variables of both the companies, it is found that the coefficient of correlation between net profit and total assets is -0.53 and -0.30, which shows that both companies have low degree of negative significance.

### 4.3.2 Correlation between Net Profits and Earning Assets

The coefficient of correlation between net profit and earning assets is to measure the degree of relationship between these two variables. In the study net profit is dependent variable and earning asset is independent variable. The purpose of the computing correlation coefficient is to justify whether there is any relationship between two variables or not. Calculation of correlation of the variables is shown below:

Table: 4.15

**Correlation between Net Profits and Earning Assets**

<b>S.n.</b>	<b>Company</b>	<b>Correlation</b>	<b>Remarks</b>
1.	NLIC	-0.437394	
2.	LIC	-0.295832	

*(See Appendix: III for Calculation)*

From above calculation the correlation coefficient of net profit and earning assets has found -0.44 and -0.30 of NLIC and LIC respectively. The result shows that there is low significance between net profit and earning assets value. Thus, the relation of the net profit and earning assets of NLIC is much negative significance than LIC.

**4.3.3 Correlation between Net Profits and Interest income**

The coefficient of correlation between net profit and interest income is to measure the degree of relationship between these two variables. In the analysis net profit is dependent variable and interest income is independent variable. The purpose of the computing correlation coefficient is to justify whether there is any relationship between two variables or not. The value of correlation of the variables is shown below:

Table: 4.16

**Correlation between Net Profits and Interest Income**

<b>S.n.</b>	<b>Company</b>	<b>Correlation</b>	<b>Remarks</b>
1.	NLIC	-0.413051	
2.	LIC	-0.425218	

*(See Appendix: IV for Calculation)*

From the computation of correlation between the two variables of NLIC and LIC, it is found that the coefficient of correlations between net profit and interest income is -0.32 and -0.42 respectively. It shows that there is low degree of negative correlation of both companies respectively.

#### 4.3.4 Correlation between Net Profits and Managerial Expenses

The coefficient of correlation between net profit and managerial expenses is to measure the degree of relationship between these two variables. In the analysis net profit is dependent variable and a managerial expense is independent variable. The purpose of the computing correlation coefficient is to justify whether there is any relationship between two variables or not. Calculation of correlation of the variables is shown below:

Table: 4.17  
**Correlation between Net Profits and Managerial Expenses**

<b>S.n.</b>	<b>Company</b>	<b>Correlation</b>	<b>Remarks</b>
1.	NLIC	-0.526488	
2.	LIC	-0.296688	

*(See Appendix: V for Calculation)*

From the computation of correlation between the two variables of NLIC and LIC, it is found that the coefficient of correlations between net profit and managerial expenses of NLIC is -0.52, and the correlation is -0.30 in LIC, which shows that there is low degree of negative correlation between these two variables.

#### 4.3.5 Correlation between Net Profits and Life Insurance Fund

The coefficient of correlation between net profit and life insurance fund is to measure the degree of relationship between these two variables. In the analysis net profit is dependent variable and life insurance fund is independent variable. The purpose of the computing correlation coefficient is to justify whether there is any relationship between two variables or not.

Table: 4.18  
**Correlation between Net Profits and Life Insurance Fund**

<b>S.n.</b>	<b>Company</b>	<b>Correlation</b>	<b>Remarks</b>
1.	NLIC	-0.493014478	
2.	LIC	-0.340663893	

*(See Appendix: VI for Calculation)*

From the computation of correlation between the two variables of NLIC and LIC, it is found that the coefficient of correlations between net profit and life insurance fund is -0.50 and -0.34 respectively, which shows that there is low degree of negative correlation between these two variables in both the companies.

#### **4.4 Major Findings of the Study**

From above data analysis, we came to summarize to finding as mentioned below:

- It is depicted that the return on assets ratio of NLIC is 0.58 and LIC is 1.36 percent on average. The standard deviation was 0.95 and 1.10 respectively. Meantime its CV has found 1.63 and 0.80 respectively. The ratios of NLIC are more dispersed than LIC in the study period.
- It is found that the return on equity ratio of NLIC is 4.91 percent on average. Similarly average return on equity ratio of LIC is 14.53 percent. Comparatively the ratio of LIC is more stable than NLIC.
- It is found that the average return on earning assets ratio of NLIC is 0.59 percent and that of LIC is only 1.40 percent. Ratios of the both insurance companies are in instability trend. Higher the CV shows the greater variability in the ratios of NLIC.
- It is found that Net Profit on Life Insurance Fund ratio of NLIC is 0.80 percent on average. Similarly the ratio of LIC is 1.91 percent. Comparatively the ratios of NLIC are more scattered than NLIC.
- It is depicted that Interest Income to Total Income Ratio of NLIC is 12.30 percent on average. Similarly that ratio of LIC is 13.95 percent. The ratios are in increasing trend. Comparatively the ratios of NLIC are more homogeneous than LIC.
- It is shown that Interest Income to Total Assets Ratio of NLIC and LIC are 4.67 and 5.08 percent on average respectively. Comparatively the ratios of NLIC are more dispersed than LIC.
- It is found that Interest Income to Total Earning Assets Ratio of NLIC is 4.96 percent on average. Similarly that of the LIC is 5.34 percent. Comparatively the ratios of LIC are more dispersed than NLIC.

- It is found that salary and allowance expenses to total managerial expenses ratio of NLIC is 20.78 percent and LIC is 19.43 percent on average. Comparatively the ratios of NLIC are more consistent than LIC.
- It is found that office expenses to total managerial expenses ratio of NLIC is 8.96 percent on average and LIC is 9.03 percent. Comparatively the ratios of NLIC are more consistent than LIC.
- It is found that the return on total assets ratio NLIC and LIC are in decreasing trend. The rate of change of NLIC is less negative than LIC.
- It is found that the return on earning assets ratio NLIC and LIC are also in decreasing trend. The rate of change of LIC is much more negative than NLIC.
- It is found that the return on equity ratio NLIC and LIC are also in decreasing trend.
- It is found that the net profit to life insurance fund ratio NLIC and LIC are in decreasing trend.
- From the correlation analysis of the net profit with total assets, earning assets, interest income, managerial expenses and life insurance fund taking net profit as dependent variable, it is found that there is low degree of negative correlation between net profit and these variables of both companies.

# **CHAPTER – V**

## **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Summary**

Basically, the entire research work has focused on the comparative study on profitability of insurance company. For the study, two life insurance companies are taken as sample and analyzed their profitability and other related factors affecting the profitability. Five years secondary data, i.e. from 2006 to 2010, are taken for the study. The general objective of this study is to evaluate the profitability of Nepal Life Insurance Company Ltd. and Life Insurance Corporation Nepal Ltd. Based on the study the following factors are discovered though we basically focused on the profitability and the associated components of it. The outcome is based on different ratio analysis, trend analysis and test of correlation at the end to draw the association between different financial figures.

On the ratio analysis and the respective trend side under mentioned are the findings that summaries the outcome:

Based on calculation, the Return on Assets Ratio of NLIC seems more constant than LIC. The ROA of NLIC for the first study year was 2.48% and it gone to 0 on the year 2007 and got an increasing trend from that year to the last study year. The ROA of NLIC for 2010 goes to 0.12%. Whereas, ROA of LIC seems unpredictable trend. It was 2.40% for the year 2006 and came down for next two years and it was 0.18% for the year 2008. It increased to 2.15 on 2009 and again decreases to -0.12% for last year.

Similarly on return on equity ratio of NLIC is found to be 4.91 percent on average. NLIC has not earned profit in the year 2007. The maximum ratio in 18.52 percent in

2006 and minimum ratio is 0.00 % in the year 2007. Similarly average return on equity ratio of LIC is 14.53 percent. The highest ratio is 34.84 percent in the year 2009, while the minimum ratio is -2.52% in 2010.

For the same, the trend of net profit and earning assets of both companies shows that the average return on earning assets ratio of NLIC is 0.59 percent. The lowest ratio on the year 2007 was 0.00. Meantime, NLIC has got highest return on earning assets on 2006 which was 2.49%. Moreover LIC has average return earnings ratio was 1.40 for the study period. It has 2.38 ROEA ratio in the year 2007 and gone to negative by -0.13 in 2010.

The additional ratio taken into consideration is net profit to Life Insurance Fund ratio of both insurance companies. Regarding the NPLIF ratio, NLIC has a highest ratio on 2006 as 3.51. It gone to 0 on 2007 and in increasing trend on last three years and it has 0.11 on 2010. The LIC has 3.93 on 2006 and gone 3.02 and 0.20 for second and third year respectively. It improved its ratio on 2009 and decreased to -0.13 for last study year. The average ratio for the study period is 0.80 and 1.91 for NLIC and LIC respectively. It has 1.36 and 1.60 standard deviation and 1.71 and 0.84 correlation of variance respectively.

On Interest Income to Total Income Ratio, NLIC stood on 12.30 percent on an average. The maximum ratio is 15.49 percent in the year 2010 and the minimum ratio is 10.20 percent in the year 2006. The ratios are in increasing trend. Similarly average Interest Income to Total Income Ratio of LIC is 13.95 percent. The highest ratio is 17.72 percent in the year 2010, while the minimum ratio is 11.59 % in the year 2006. The ratio of LIC is also in increasing trend.

On Interest Income to Total Assets Ratio, NLIC stand on 4.67 percent on an average. The maximum ratio is 6.86 percent in the year 2010 and the minimum ratio is 3.60 percent in the year 2006. Similarly average Interest Income to Total Assets Ratio of LIC is 5.08 percent. The highest ratio is 6.24 percent in the year 2010, while the minimum ratio is 4.28 % in the year 2007.

The next ration that is calculated is interest income to total earning assets ratio of NLIC and LIC. Throughout the five year study period the average ratio of NLIC and LIC were 4.96 and 5.34 respectively. The standard deviation and coefficient variance of data has found 1.04 and 0.81 and 0.21 and 6.59 respectively.

We also included salary and allowance expenses to total managerial expenses ratio for calculation purpose. The same is calculated to be 20.78 percent on average in case of NLIC. The maximum ratio in 21.94 percent in the year 2006 and the minimum ratio is 18.54 percent in the year 2010. Similarly average salary and allowance expenses to total managerial expenses ratio of LIC is 19.43 percent. The highest ratio is 27.32 percent in the year 2008, while the minimum ratio is 14.97 % in the year 2010.

Beside allowances, an office expense was also tied up with managerial expenses to find out the proportion. On this, the ratio of NLIC is 8.96 percent on average. The maximum ratio in 11.11 percent in the mid-year 2008 and the minimum ratio is 5.92 percent in the year 2007. Similarly average office expenses to total managerial expenses ratio of LIC is 9.03 percent. The highest ratio is 10.97 percent in the year 2008, while the minimum ratio is 7.81 % in the year 2007. Ratios of the both companies are in decreasing trend.

If we look into the trend side, the return on total assets ratio NLIC and LIC are in decreasing trend. The rate of change of LIC is much negative than NLIC. The trend of NLIC is decreasing by the ratio of -0.45%. Similarly, the trend of LIC is increasing by the ratio of -0.51%. If other things remain same, return on total assets ratio NLIC will be -0.78, -1.23 and -1.69 for the year 2011, 2012 and 2013 respectively meantime, LIC will be -0.17, -0.68 and -1.19 respectively.

Like in the case of total assets, the return on earning assets ratio of NLIC and LIC are in decreasing trend. The rate of change of NLIC is less than LIC. The trend of NLIC is decreasing by the ratio of -0.46%. Similarly, the trend of LIC is increasing by the ratio of -0.48%. If other things remain same, return on earning assets ratio NLIC and LIC will be -1.68% and -1.01% respectively in the year 2013.

Following the similar trend, the return on equity ratio of NLIC and LIC are found showing the decreasing trend. The rate of change of NLIC is more negative than LIC. The trend of NLIC is decreasing by the ratio of -3.10%. Similarly, the trend of LIC is decreasing by the ratio of -2.64%. If other things remain same, return on earning assets ratio NLIC and LIC for year 2011 to 2013 will be -4.39 and -6.62, -7.50 and 3.98 and -10.6% and 1.35% respectively.

Taking profit into consideration the net profit to life insurance fund ratio of NLIC and LIC are in decreasing trend. The rate of change of NLIC and LIC is homogeneous i.e. -0.66% and -0.86% respectively. If other things remain same, net profit to life insurance fund ratio of NLIC and LIC will be -2.50% and -2.39% respectively in the year 2013

Along with the ratios and the trend factors, the association between variables is also tested during the course of analysis. As produced by analysis, the followings summarize the results:

From the computation of correlation between net profit and total assets of both the companies, it is found that the coefficient of correlation of NLIC and LIC are -0.53 and -0.30 respectively, which shows that both companies have low degree of negative significance.

The correlation coefficient of net profit and earning assets has found -0.44 and -0.30 of NLIC and LIC respectively. The result shows that there is low significance between net profit and earning assets value. Thus, the relation of the net profit and earning assets of NLIC is much negative significance than LIC.

Through the computation of correlation between the net profit and interest income of NLIC and LIC, it is found that the coefficient of correlations between net profit and interest income is -0.41 and -0.42 respectively. It shows that there is low degree of negative correlation of both companies respectively.

When we looked into the correlation between net profit and managerial expenses of NLIC and LIC, it is revealed that the coefficient of correlations between net profit and

managerial expenses of NLIC is -0.53, and the correlation is -0.30 in LIC, which shows that there is low degree of negative correlation between these two variables.

While checking the correlation between the net profit and life insurance fund between NLIC and LIC, it is found that the coefficient of correlations between net profit and life insurance fund is -0.50 and -0.34 respectively, which shows that there is low degree of negative correlation between these two variables in both the companies.

## **5.2 Conclusions**

Based on the research findings, following conclusions are derived.

- Return on earnings ratio as well as return on assets ratio is less than 3 percent in the both company, which is very minimum. Meantime ROA of LIC for last year found -0.12. Further, from the trend analysis of these ratios of both companies three year projected return is going negative which shows very terrible condition on financial return.
- It is found that the average return on equity ratio of NLIC is only 4.91, meantime LIC has 14.53 percent.
- Net Profit on Life Insurance Fund ratio of NLIC is 0.80 percent on average. Similarly the ratio of LIC is 1.91 percent. Comparatively the ratios of LIC are more scattered than NLIC.
- The proportion of Interest Income in Total Income of NLIC and LIC are 12.30 and 13.95 percent respectively.
- Interest income to total assets ratio has found as 4.67 and 5.08 of NLIC and LIC respectively. The trend of this ratio has found increasing trend.
- Interest income to total earning assets ratio of NLIC has found 4.96 whereas LIC has 5.34 on average for the study period.
- Salary and allowance expenses to total managerial expenses ratio of NLIC is 20.78 percent and LIC is 19.43 percent on average. Both company expenses in decreasing trend.

- The trend of return on assets ratio, return on earning assets ratio, return on equity ratio, and return on earning assets ratio and net profit to life insurance fund ratio has found in decreasing trend for both companies.
- There is low degree of negative correlation between net profit and total assets, net profit and earning assets, net profit and interest income and net profit and managerial expenses.

### **5.3 Recommendations**

Insurance business in Nepal is on infant stage. The financial figures of those companies vary based on the name of the organization. On the basis of analysis and the findings of the study for the mentioned time frame, following suggestions and recommendations are made to work on probable areas of improvements and the areas of prospects:

- Return on Assets ratio figures shows questionable status of both companies, to correct the same the increment to the assets value should either be minimized or increase the profit by other diversifying investment so that it will cover at least prevailing market rate of return.
- Average return on equity of above 14% is satisfactory in case of LIC and in case of NLIC it's almost three times lower, on this regard it is suggested to NLIC to utilize equity fund rather than adding up only.
- Net profit to life insurance fund ratio has questioned on the efficiency of management, the positive correlation between the variables should be reflected.
- Interest income out of total income is around 13% only to both companies, so it is suggested to maintain the ratio on upcoming days as reinvestment has become the considerable business of insurance companies.
- The interest income to total earning assets ratio has given question to minimum rate of return, so it is suggested to figure out deficiencies.
- The trend of net profit in insurance industry seems to decreasing trend. In this regard, the companies suggested to decrease their expenses on unproductive area. It, may occur the positive response on profitability ratios.

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## APPENDIX – I

### FINANCIAL SUMMARY (NLIC)

S.N.	Particulars	YEAR				
		2006	2007	2008	2009	2010
1	Net Profit	463	0	42	80	63
2	Total Assets	18686	25131	31973	44333	52914
3	Total Equity	2500	2500	2500	3000	3750
4	Earning Assets	18572	23180	27555	38834	54942
5	Life Insurance Fund	13176	19718	27615	39322	55253
6	Interest Income	673	950	1421	2056	3631
7	Total Income	6596	8882	11150	16655	23435
8	salary and Allowance	95	109	173	253	467
9	Total Management Expenses	433	517	792	1233	2519
10	Office Expenses	40	45	88	121	149

### FINANCIAL SUMMARY (LIC)

S.N.	Particulars	YEAR				
		2006	2007	2008	2009	2010
1	Net Profit	447	510	51	871	-63
2	Total Assets	18623	23017	28961	40565	53524
3	Total Equity	2500	2500	2500	2500	2500
4	Earning Assets	19876	21441	26892	37785	49685
5	Life Insurance Fund	11368	16889	24923	34256	48139
6	Interest Income	887	985	1488	2027	3340
7	Total Income	7656	8251	10493	14125	18850
8	salary and Allowance	94	109	147	156	220
9	Total Management Expenses	444	589	538	1029	1470
10	Office Expenses	39	46	59	90	130

## APENDIX – II

### Correlation between Net Profits and Total Assets (NLIC)

(Rs. in Lakh)

Year	Net Profit (X)	Total Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	463	18686	333.4	-15921.4	111156	253490978	-5308195
2007	0	25131	-129.6	-9476.4	16796	89802157	1228141
2008	42	31973	-87.6	-2634.4	7673.8	6940063.4	230773.4
2009	80	44333	-49.6	9725.6	2460.2	94587295	-482390
2010	63	52914	-66.6	18306.6	4435.6	335131604	-1219220
<b>Σ</b>	<b>648</b>	<b>173037</b>	<b>0</b>	<b>0</b>	<b>142521</b>	<b>779952097</b>	<b>-5550889</b>

Calculation of Mean:

$$\bar{x} = \frac{\Sigma x}{n} = \frac{648}{5} = 129.6$$

$$\bar{y} = \frac{\Sigma y}{n} = \frac{173037}{5} = 34607.4$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-5550889}{\sqrt{142521} \sqrt{779952097}} \quad r = -0.526488$$

### Correlation between Net Profits and Total Assets (LIC)

(Rs. in Lakh)

Year	Net Profit (X)	Total Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	447	18623	83.8	-14315	7022.4	204919225	-1199597
2007	510	23017	146.8	-9921	21550	98426241	-1456403
2008	51	28961	-312.2	-3977	97469	15816529	1241619
2009	871	40565	507.8	7627	257861	58171129	3872991
2010	-63	53524	-426.2	20586	181646	423783396	-8773753
<b>Σ</b>	<b>1816</b>	<b>164690</b>	<b>0</b>	<b>0</b>	<b>565549</b>	<b>801116520</b>	<b>-6315143</b>

Calculation of Mean:

$$\bar{x} = \frac{\Sigma x}{n} = \frac{1816}{5} = 363.2$$

$$\bar{y} = \frac{\Sigma y}{n} = \frac{164690}{5} = 32938$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-6315143}{\sqrt{565549} \sqrt{801116520}} \quad r = -0.296688$$

## APPENDIX – III

### Correlation Between Net Profits and Earning Assets (NLIC)

(Rs. in Lakh)

Year	Net Profit (X)	Earning Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	463	18572	333.4	-14044.6	111156	197250789	-4682470
2007	0	23180	-129.6	-9436.6	16796	89049420	-1423197
2008	42	27555	-87.6	-5061.6	7673.8	25619795	443396.2
2009	80	38834	-49.6	6217.4	2460.2	38656063	-308383
2010	63	54942	-66.6	22325.4	4435.6	498423485	-1486872
<b>Σ</b>	<b>648</b>	<b>163083</b>	<b>0</b>	<b>0</b>	<b>142521</b>	<b>848999551</b>	<b>-4811345</b>

Calculation of Mean:

$$\begin{aligned} \bar{x} &= \frac{\Sigma x}{n} = \frac{648}{5} = 129.6 \\ \bar{y} &= \frac{\Sigma y}{n} = \frac{163083}{5} = 32616.6 \end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-4811345}{\sqrt{142521} \sqrt{848999551}} \quad r = -0.437394$$

### Correlation Between Net Profits and Earning Assets (LIC)

(Rs. in Lakh)

Year	Net Profit (X)	Earning Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	447	19876	83.8	-11259.8	7022.4	126783096	-943571
2007	510	21441	146.8	-9694.8	21550	93989147	-1423197
2008	51	26892	-312.2	-4243.8	97469	18009838	1324914
2009	871	37785	507.8	6649.2	257861	44211861	3376464
2010	-63	49685	-426.2	18549.2	181646	344072821	-7905669
<b>Σ</b>	<b>1816</b>	<b>155679</b>	<b>0</b>	<b>0</b>	<b>565549</b>	<b>627066763</b>	<b>-5571059</b>

Calculation of Mean:

$$\begin{aligned} \bar{x} &= \frac{\Sigma x}{n} = \frac{1816}{5} = 363.2 \\ \bar{y} &= \frac{\Sigma y}{n} = \frac{155679}{5} = 31135.8 \end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-5571059}{\sqrt{565549} \sqrt{627066763}} \quad r = -0.295832$$

## APPENDIX – IV

### Correlation Between Net Profits and Interest Income (NLIC)

(Rs. in Lakh)

Year	Net Profit (X)	Interest Income (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	463	673	333.4	-1073	111156	1151758.2	-357805
2007	0	950	-129.6	-796.2	16796	633934.44	103187.5
2008	42	1421	-87.6	-325.2	7673.8	105755.04	28487.52
2009	80	2056	-49.6	309.8	2460.2	95976.04	-15366.1
2010	63	3631	-66.6	1884.8	4435.6	3552471	-125528
<b>Σ</b>	<b>648</b>	<b>8731</b>	<b>0</b>	<b>0</b>	<b>142521</b>	<b>5539894.8</b>	<b>-367024</b>

Calculation of Mean:

$$\begin{aligned} \bar{x} &= \Sigma x/n &= 695/5 &= 129.6 \\ \bar{y} &= \Sigma y/n &= 8670/5 &= 1746.2 \end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-367024}{\sqrt{142521} \sqrt{5539894.8}} \quad r = -0.413051$$

### Correlation Between Net Profits and Interest income (LIC)

(Rs. in Lakh)

Year	Net Profit (X)	Interest Income (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	447	887	83.8	-858.4	7022.4	736850.56	-71933.9
2007	510	985	146.8	-760.4	21550	578208.16	-111627
2008	51	1488	-312.2	-257.4	97469	66254.76	80360.28
2009	871	2027	507.8	281.6	257861	79298.56	142996.5
2010	-63	3340	-426.2	1594.6	181646	2542749.2	-679619
<b>Σ</b>	<b>1816</b>	<b>8727</b>	<b>0</b>	<b>0</b>	<b>565549</b>	<b>4003361.2</b>	<b>-639822</b>

Calculation of Mean:

$$\begin{aligned} \bar{x} &= \Sigma x/n &= 1816/5 &= 363.2 \\ \bar{y} &= \Sigma y/n &= 8727/5 &= 1745.4 \end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-639822}{\sqrt{565549} \sqrt{4003361.2}} \quad r = -0.425218$$

## APPENDIX – V

### Correlation Between Net Profits and Managerial Expenses (NLIC)

(Rs. in Lakh)

Year	Net Profit (X)	Total Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	463	18686	333.4	-15921.4	111156	253490978	-5308195
2007	0	25131	-129.6	-9476.4	16796	89802157	1228141
2008	42	31973	-87.6	-2634.4	7673.8	6940063.4	230773.4
2009	80	44333	-49.6	9725.6	2460.2	94587295	-482390
2010	63	52914	-66.6	18306.6	4435.6	335131604	-1219220
<b>Σ</b>	<b>648</b>	<b>173037</b>	<b>0</b>	<b>0</b>	<b>142521</b>	<b>779952097</b>	<b>-5550889</b>

Calculation of Mean:

$$\begin{aligned}\bar{x} &= \Sigma x/n = 695/5 = 129.6 \\ \bar{y} &= \Sigma y/n = 172433/5 = 34607.4\end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-5550889}{\sqrt{142521} \sqrt{779952097}} \quad r = -0.526488$$

### Correlation Between Net Profits and Managerial Expenses (LIC)

(Rs. in Lakh)

Year	Net Profit (X)	Total Assets (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	447	18623	83.8	-14315	7022.4	204919225	-1199597
2007	510	23017	146.8	-9921	21550	98426241	-1456403
2008	51	28961	-312.2	-3977	97469	15816529	1241619
2009	871	40565	507.8	7627	257861	58171129	3872991
2010	-63	53524	-426.2	20586	181646	423783396	-8773753
<b>Σ</b>	<b>1816</b>	<b>164690</b>	<b>0</b>	<b>0</b>	<b>565549</b>	<b>801116520</b>	<b>-6315143</b>

Calculation of Mean:

$$\begin{aligned}\bar{x} &= \Sigma x/n = 1816/5 = 363.2 \\ \bar{y} &= \Sigma y/n = 164690/5 = 32938\end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-6315143}{\sqrt{565549} \sqrt{801116520}} \quad r = -0.296688$$

## APPENDIX – VI

### Correlation Between Net Profits and Life Insurance Fund (NLIC)

(Rs. in Lakh)

Year	Net Profit (X)	LI Fund (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	463	13176	333.4	-17840.8	111156	318294144.6	-5948123
2007	0	19718	-129.6	-11298.8	16796	127662881.4	1464324
2008	42	27615	-87.6	-3401.8	7673.8	11572243.24	297997.7
2009	80	39322	-49.6	8305.2	2460.2	68976347.04	-411938
2010	63	55253	-66.6	24236.2	4435.6	587393390.4	-1614131
<b>Σ</b>	<b>648</b>	<b>155084</b>	<b>0</b>	<b>0</b>	<b>142521</b>	<b>1113899007</b>	<b>-6211869</b>

Calculation of Mean:

$$\begin{aligned}\bar{x} &= \Sigma x/n &= 695/5 &= 129.6 \\ \bar{y} &= \Sigma y/n &= 145485/5 &= 31016.8\end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-6211869}{\sqrt{142521} \sqrt{1113899007}} \quad r = -0.493014478$$

### Correlation Between Net Profits and Life Insurance Fund (LIC)

(Rs. in Lakh)

Year	Net Profit (X)	LI Fund (Y)	$x=X-\bar{x}$	$y=Y-\bar{y}$	$x^2$	$y^2$	xy
2006	447	11368	83.8	-15747	7022.4	247968009	-1319599
2007	510	16889	146.8	-10226	21550	104571076	-1501177
2008	51	24923	-312.2	-2192	97469	4804864	684342.4
2009	871	34256	507.8	7141	257861	50993881	3626200
2010	-63	48139	-426.2	21024	181646	442008576	-8960429
<b>Σ</b>	<b>1816</b>	<b>135575</b>	<b>0</b>	<b>0</b>	<b>565549</b>	<b>850346406</b>	<b>-7470662</b>

Calculation of Mean:

$$\begin{aligned}\bar{x} &= \Sigma x/n &= 1816/5 &= 363.2 \\ \bar{y} &= \Sigma y/n &= 135575/5 &= 27115\end{aligned}$$

Calculation of Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}} = \frac{-7470662}{\sqrt{565549} \sqrt{850346406}} \quad r = -0.340663893$$

