IMPACT OF INVESTMENT ON PROFITABILITY OF LIFE INSURANCE COMPANIES IN NEPAL

A dissertation submitted to the Office of the Dean, Faculty of Management, in the partial fulfilment of the requirement of the degree of Master of Business Studies

BY

SMITA SUBEDI

Symbol No.: 7345/18

Roll No.: 06/074

T.U. Registration No.:7-2-271-23-2013

People's Campus

Kathmandu

February, 2022

IMPACT OF INVESTMENT ON PROFITABILITY OF LIFE INSURANCE COMPANIES IN NEPAL

A dissertation submitted to the Office of the Dean, Faculty of

Management, in the partial fulfilment of the requirement of the degree of

Master of Business Studies

BY

SMITA SUBEDI

Symbol No.: 7345/18

Roll No.: 06/074

T.U. Registration No.:7-2-271-23-2013

People's Campus

Kathmandu

February, 2021

Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Impact of investment on profitability of Life Insurance Companies in Nepal". The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

Smita Subedi
24-02-2022

Report of Research Committee

Ms. Smita Subedi has defended a research proposal entitled "Impact of investment on profitability of Life Insurance Companies in Nepal" successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidance of supervisor Prof. Dr. Arhan Sthapit and submit the dissertation for evaluation and viva voce examination.

Prof. Arhan Sthapit, PhD
Supervisor

Dissertation Proposal Defended Date:

Prof. Arhan Sthapit, PhD
Supervisor

Dissertation Submitted Date:

Gopal Krishna Shrestha, PhD
Head of Research Committee

Dissertation Viva Voce Date:

Approval Sheet

This dissertation entitled “Impact of investment on profitability of Life Insurance Companies in Nepal” submitted by Ms. Smita Subedi to the faculty of Management, Tribhuvan University, in partial fulfilment of the requirements for the degree of Masters of Business Studies has been found satisfactory in scope and quality. Therefore, we hereby certify that the dissertation is acceptable for the award of degree.

Dissertation Supervisor

Internal Examiner

External Examiner

Chairperson, Research Committee

Acknowledgements

This dissertation would not have been possible without the support and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of the study.

Firstly, I would like to express my profound gratitude to my supervisor Prof. Dr. Arhan Sthapit for his guidance with valuable comments and kind support to me all the way throughout the period. This dissertation would not have been possible without his supervision and constant guidance. I would also like to express my sincere thanks to MBS coordinator Pramod Raj Sharma for helping me in my effort to conduct this dissertation through administrative support.

I convey special acknowledgement to my respected parents and other family members for their love and encouragement throughout my study period and immeasurable support and inspirations. I also would like to express thanks to all my friends, relatives, and those individuals and institutional personalities who are directly and indirectly involve in conducting this research for their help, suggestions, and motivation to accomplish the research in time.

Smita Subedi

February, 2022

Table of Content

List of Table

List of Figure

Abbreviations

APT : Arbitrage Pricing Theory

CAPM : Capital Asset Pricing Model

CV : Coefficient of Variation

EPS : Earning Per Share

FD : Fixed Deposit

FY : Fiscal Year

LTI : Long Term Investment

MPS : Market Price Per Share

NRB : Nepal Rastra Bank

RE : Random Effect

ROA : Return on Asset

ROE : Return on Equity

SEBON : Securities Board of Nepal

STI : Short Term Investment

Abstract

The purpose of this study was to know the impact of investment and profitability of life insurance companies in Nepal. This study aims to examine the association between short-term and long-term investment and profitability of selected life insurance companies. In the study, two variables were taken as independent variable: long term investment and short term investment whereas return on equity was taken as dependent variable. A descriptive and causal comparative research design are used for this study. Four companies established between the year 2000-2008 were selected as a sample. Also the study tried to assess the companies' ten years' data i.e. from 2009-2019. Various tools used for data analysis are mean, standard deviation, coefficient of variation, correlation, regression etc. The data are collected from the various years' annual report of selected life insurance companies. The finding shows that the profitability of all selected insurance companies is in fluctuating position whereas short-term and long-term investment position is increasing in certain companies and fluctuating in others. The relationship between long term investment and return on equity is found to be positive and insignificant whereas positive and significant between short term investment and return on equity.

Key words: Long term investment, Short term investment and Return on equity.

CHAPTER I

INTRODUCTION

1.1 Background of the study

Insurance operates as a windbreaker on such a humid day. It is an agreement between the insurer and the insured in which the members agree to indemnify the insured for a loss caused by a particular cause within such a particular time period in consideration for a financial compensation known as premium. Life insurance insures a family in the instance of an individual's untimely passing or provides an appropriate amount in later life when earning capacities are diminished. Insurance divides the cost of a threat among a significant number of people who are exposed to the same danger in order to compensate the few who are genuinely harmed by it. It is a public service wherein the one party, the insurer or insurance company, promises to cover a specified risk in exchange for a monetary payment from a number of other parties, the insured; the monetary payment is known as the premium. A fire insurance company, for instance, will issue a policy in exchange for payment of a premium, in which the insurance agrees to compensate the insured for a fire loss, but only up to the amount mentioned in the policy and only if the loss happens within the period for which the policy is valid. In this approach, life insurance is really a form of protection as well as an investment, as a predetermined sum is repaid to the insured at the moment of death at the end of a given period. This arrangement is considered to be of high level of good faith and insurable interest. Insurance, in this context, is a system for minimizing financial losses by transferring risk of loss from one institution to another. Insurance is a device providing financial compensation to those who suffer from misfortune. In other words, insurance is the best means for security to human life and property from various risks (Shrestha, 2001).

Insurance companies are among the most important financial institutions and intermediates. Only when a competitive insurance service reaches every parts of the country the country's development remains integrated and efficient. Insurance companies play a prominent part in the framework of every economy since they provide certainty to manufacturing,

business, and capital for the growth of industrialization, trade, and business through the investment of premium resources. Insurance companies could provide industrial financing, government financing, and even personal financing. They provide different forms of investments through their own investment policy pattern, which would be based on their company objectives and the characteristics of the insurance area of business.

Insurance company charges a certain amount called premium in return of assuring the insured for indemnity if the stated risk caused economic losses within the policy period. Insurance company collected fund in the form of premium and invests in different sectors for maximum return. Once earned, the premium is regarded as the income of the insurance industry. The growth and development of an insurance industry is basedon the large number of groups of various individuals, corporate businesses and financial organization who are policy holders of the company obtained directly by the representatives or through agents. The large number of policyholders leads to the large amount of premium collection for the minimization of occurrence of various risk and uncertainties. Insurance companies are considered as an important part of an institutional investment of any country as they invest in corporate securities as well as other collective investment schemes and in turn, they produce sufficient income to meet their obligations in the form of promised insurance benefits (Securities Board of Nepal, 2007).

Insurance companies performed three distinct jobs: i) Risk pooling, diversifying and loss compensation, ii) Risk management; and iii) Resource mobilization. Academicians are agreed on the positive role of insurance in both developed and developing economies. Insurance enhance the economy through promoting financial stability, mobilizing savings, facilitating trade and commerce, enabling risk management, encouraging loss mitigation, fostering efficient capital allocation, substituting the complement of government social security programs (Skipper, 2001).

Insurance is a useful device for solving complex social problems. Compensating Victims of industrial accidents is handled by compulsory workers, compensation insurance; and indemnifying innocent automobile accident victims is handled to some extent by financial responsibility laws with most people comply by furnishing evidence of ownership of automobile liability insurance. Some insurance help, solve the financial problems of

unemployment; old age, disability, death and medical care for the aged (Mehr, 1983). Insurance is affected with the public interest and is consequently subject to government regulation, mostly by the states.

The insurance industry is a significant and important element of the macro economy, and it has emerged as a powerful institutional player in the financial market, influencing the economy's health through its multifaceted role in saving and capital markets. It acts as a mobilizer of savings, a financial intermediary, a promoter of investment activities, a stabilizer of financial markets and a risk manager. Insurance companies generally function on two dimensional landscapes, which embrace a) underwriting activity, which is mainly centred on collecting premiums and honouring claim; b) investment activity, which is meant to dispense allowed assets into various investments to earn additional revenues in the form of interest, dividends and realized capital gains (Hussain, 2016).

Insurance, in its pure insurance function may be likened to the springs of vehicle. It absorbs the shock and distributes it over all risks insured in the same class. It permits a free functioning of credit and industry generally but does not eliminate loss. The retarding effect of risk removed, but the cost and retarding effect of loss are still present. The burden of loss is still on society (Mowhary & Blanchard, 1995).

Nowadays in the pace of rapid growth and development of insurance industries, it is very important to develop appropriate strategies that might aid the insurance practitioners to develop appropriate insurance products and services. Insurance manages the risk of uncertainty in an effective way and plays a significant role in mobilizing domestic savings, turning capital into productive investments, by managing loss and maintain financial stability. The non-life insurance hence plays a crucial role in promoting the trade and commerce activities which contributes to the sustainable growth of an economy. The indemnification principle of insurance mainly focuses on compensating the insured for the loss that occurs. In addition to this, as financial intermediaries, it accumulates funds and channelized the saving in national development which ultimately helps in economic growth. This shows insurance as a source of capital formation for development and growth of a country.

In our society, the concept of insurance can be traced down to the Guthi System and joint family culture that has been prevalent since the ancient times. These systems have provided security and assistance to individuals and families in time of need. With the change in the economic and social perspectives and the increasing complexities of the upcoming small-scale industries, an immense need for a domestic company was felt to insure against any loss that could arise due to mishaps in industries. With the development of trade, commerce and industry, the necessity of insurance in our country was felt long age. However, there was no evidence of any organized form of insurance in Nepal until 1947. Society was organized and settled in an agricultural basis and the socio-economic organization took care of any problem or calamity confronted to the community. The fire insurance in Nepal, at first was started by Mal Chalani Ra Beema (Transport and Insurance Company). The National fire insurance company of Calcutta is the first insurance company to open branch in Kathmandu in 1958, to transact fire insurance business in Nepal. With the development of trade and industry, establishment of Nepal Rastra Bank (Central Bank), Nepal Bank Ltd. (Commercial Bank), Rastriya Banijya Bank (Commercial Bank), Agricultural Development Bank, Co-operative Bank, Nepal Industrial Development Corporation, numerous other companies and corporations, the need of fire insurance in Nepal is growing in a manifold way. To meet ever-growing needs of fire insurance Indian branches such as Rubu, Oriental, Sterling General and Hindustan General and the domestic insurance company Insurance and Transport Company and Rastriya Beema Sansthan are transacting fire insurance business. Though there is no organized form of life insurance in Nepal, a kind of life that can be better termed death insurance is practiced since a long time. Like insurance, there is Guthee, which helps its member in facing financial burden out of death. Its policyholders are known as Gutheear instead of insured. Though they do not have policies in black and white, they have a kind of verbal understanding by which they can work smoothly without facing any difficulties. Gutheears pay a certain amount of money to the Guthee, in the same way as the insured pays premium to the insurer. Before 1951, Patna branch of Indian Life Insurance Company was exploring life insurance business. With the nationalization of Life Insurance Corporation of India. It is solely and wholly transacting life insurance business in Nepal. It established a branch office in Kathmandu in 1962. Thus, this corporation has a kind of monopoly in life insurance business. However, a need for an insurance company that would incorporate every type of insurance function

was also felt at the national level. This resulted to establishment of Rastrya Beema Sansthan on 15th December 1968. The company was established as a private company with an authorized capital of NRs. 10 million and capital issued was NRs. 2.5 million under the Nepal Company Act, 2021. The company started its business by insuring king Mahindra's Car. A year later, the company started operating with same name but under National Insurance Corporation Act, 2025. On February 21, 1973, five years after its establishment life insurance was introduced. After the introduction of Insurance Act, 1992, the number of private insurance companies came into existence. There are altogether 40 insurance companies in Nepal, which are operating until now.

An investment is a current commitment of resources for a set length of time in exchange for future resources that will compensate the investor for the time the resources are promised, the predicted rate of inflation, and the risk – the uncertainty of future payments. Investment may also be defined as the change in capital stock during a period. Consequently, unlike capital, investment is a flow term and not a stock term. This means that capital is measured only at a point in time, while investment can only be measured over a period of time (Trygye, 2006). Murad (1964) defines the term investment as the purchase of any income-yielding asset, such as securities or real estate. Investment can also be defined as the addition to the value of the capital equipment which has resulted from the productive activity of the period.

One of the most important aspects of every financial organization is investment. With a profit objective, all financial organizations invest their surplus money in the appropriate sector. The term investment refers to the outflow of money with a variable return on investment. Investment policy is the first step in determining which investment sector to invest in, based on a single or combined consideration of security, capital requirements, market value, revenue growth, and sustainability, and instead. The most common investment opportunities that are pursued by most of these institutions world over include investment in real estate, equities, treasury bills and bonds, deposits with banks, and certificates of deposits. These investments expected to earn additional revenues in the form of interest, dividends and realized capital gains. The investment fund should be made to work in a sector where it can earn far more profit. The Insurance Board of Nepal, on the other hand, monitors the investment portfolios of insurance companies. According to the

norms and regulations, each insurance firm must invest 75% of its investment capital in mandatory areas and the remaining 25% in several other sectors.

Investment earnings made by insurance firms make a valuable contribution to their operating results and enable them to reduce premiums and increase dividends and bonuses, thereby improving their competitiveness (David & Grace, 1994). It is also evident that linking investment earnings to firm-specific factors such as organizational form and size could enable policyholders and shareholders to make better-informed insurance and investment choices. Ideally, a portfolio manager should increase the systematic risk of the portfolio in anticipation of a market upturn and decrease the beta prior to a market downturn.

Profitability is, in general, the efficiency of a company or industry at generating earnings. It is necessary to invest to make a business profitable no matter what kind of business. It also seems reasonable that current profitability is related to future investment and that current investment is related to future profitability. Profitability is variously interpreted as net income, equity value and return on investment and it is a result focused indicator watched more carefully than any other performance measurement category. The performance in the insurance industry can either be financial or non-financial performance. Financial performance is profit performance and investment performance. Non-financial performance can be evaluated by looking at the internal and external factors. The net result of a well-functioning insurance market should be better pricing of risk, greater efficiency in the overall allocation of capital and mix of economic activities and higher productivity.

Ratios used to evaluate profitability include Return on Equity and return on Investment. These ratios are relevant in all firms but they are particularly important when analysing the insurance and other financial services companies. In addition, ratios specifically used in analysing insurers include the combined and operating ratios and their components, underwriting leverage, investment yield and investment return. These measures are important for evaluating profitability and primary net asset turnover.

Insurance companies can invest their funds in short term and long-term financial instruments i.e., securities of money market and capital market. The investment portfolio is generally overwhelmed by long-term assets, but one part of funds is invested in short-terms instruments for securitization of liquidity. Investment portfolio must be in accordance

with liquidity need, profitability, reinsurance arrangements, leverage and stream of premium. Every portfolio should also be rebalanced from time to time so that highest possible level of return for a given level of risk can be obtained. Insurer should determine investment portfolio by using a robust optimization framework and diversifying investment portfolio into higher income generating strategies with firm specific constraints to increase overall efficiency and risk generating return. The point of convergence for insurance investment portfolio is to ensure long-term safety, and profitability of customer's funds. Therefore, in this view of public interest, investment pattern of insurance companies is regulated in some countries (Vaidyanathan, 2000).

Most institutional investors around the globe such as insurance companies invest the money they receive in various sectors in order to receive returns. The most common investment opportunities that are pursued by most of these institutions world over include investment in real estate, equities, treasury bills and bonds, deposits with banks, and certificates of deposits. For instance, in the year 2012 alone, most institutional investors invested more than 80% of their portfolio in bonds and equities. However, there seems to be a trend where most organizations are now moving away from bills and bonds and investing in other assets such as real estate.

1.2 Statement of the problem

Nepalese insurance companies are successful Nepalese businesses that have remained in the insurance business without incurring any losses since their inception. As a result, in addition to national insurance businesses, more foreign insurance companies have started exporting in our country to conduct insurance business. There are 40 insurance businesses that have been founded and operate their services and operations as a result of many investors and business people being involved in the insurance business. The majority of businesses make more profit every year. Even so, if the balance sheet and profit and loss account are excluded, it is not substantial and satisfactory in comparison to the volume of transactions. Year after year, transaction volumes increase significantly, but net profitability does not expand at the same rate it’s due to private waiting in the rain and market competitiveness that's cutthroat. Over time, the profitability of all insurance

businesses has been observed to fluctuate. As a result, the purpose of this research is to address the following issues:

i. What is the position of existing profitability and short-term and long-term investments of selected life insurance companies in Nepal?
ii. Is there any relationship between profitability and short-term and long-term investments of selected life insurance companies in Nepal?
iii. What is the impact of short-term and long-term investments on the profitability of selected life insurance companies in Nepal?

1.3 Objectives of the study

The primary goal of this research is to examine the impact of investments of Nepalese life insurance companies on their profitability. The specific objectives of the study are as follows:

i. To examine the existing position of profitability and short-term and long-term investments of selected life insurance companies in Nepal,
ii. To assess the relationship between profitability and short-term and long-term investments of selected life insurance companies in Nepal, and
iii. To evaluate the impact of short-term and long-term investments on the profitability of selected life insurance companies in Nepal.

1.4 Hypothesis of study

The study was carried out based on certain hypothesis. With the help of hypothesis, the study is able to analyse the impact of short-term and long-term investment on return on equity. Following are the hypothesis made in order to study impact of short-term and long-term investment on return on equity of insurance companies:

$H_0$1: There is no significant relationship between short-term investment and ROE.

$H_0$2: There is no significant relationship between long-term investment and ROE.

$H_0$3: There is no significant effect of short-term investment on ROE.

$H_0$4: There is no significant effect of long-term investment on ROE.

1.5 Rationale of the study

Even in a developing country like Nepal, insurance is one of the most booming services. In Nepal, there are 40 different insurance firms. Among which 20 are general insurance, 19 are life insurance and 1 is for re-insurance business. According to analysts, life insurance companies could easily collect more than one billion dollars without trouble, which is why multinational life insurance companies have built branches in Nepal. Insurance companies are grabbing each other's market since they are primarily focused on the country's urban and major cities. They don't endeavour to implement new policies or open up new markets. They are delighted with their current position and are unable to select replacement and stable industries in which to invest their funds for a higher return. They are now solely investing in established sectors with their money. As a result, a new study on the topic of Nepalese life insurance firms' investment policies is required.

The study is required to develop the Nepalese life insurance industry's investment policy. Insurance companies must effectively utilize their funds. As a result, it would be more prudent to determine the state of Nepalese life insurance businesses. It's also necessary to explain the value of life insurance to Nepalese people. The study focuses on the life insurance industry in Nepal and the likelihood of future expansion, as well as tracing the weak areas in order to offer funds, insurance policies, and investment opportunities. It is a study of premiums collected under various plans that identifies flaws and recommends ways to address them. The study is significant in and of itself since it is a study of the foundation of the life insurance system by the researcher.

Insurance is now widely accepted as kind of a business, but the notion of insurance is not new in Nepal. Private insurance businesses have begun competitive and aggressive competition in this business as a result of liberal economic policy breaking the monopoly system and bringing competitiveness to the insurance industry. Due to this form of competition, management must become more productive, while premium rates have been cut. Lowering the rate has the potential to lower profit amount, but it can also motivate employees to work in insurance firms and provide information about the current state of the industry in Nepal. It also assists the researcher in doing fresh studies in the area of fund investment and a series of studies on other Nepalese life insurance businesses.

1.6 Limitations of the study

The study's goal is to discover the facts and tendencies in the Nepalese life insurance industry's investment policy. As a result, the area of life insurance firms operating in Nepal is limited. Each activity does have its own series of restrictions, and this subject has its own series of restrictions that must be respected. These restrictions are called as limitations of this study. The limitations of the study are:

i. The whole study will deal with some selected life insurance company's investment policy as there is 19 life insurance companies operating in Nepal but it covers only four life insurance companies.
ii. The study will concern at least ten-year period's data and conclusion drawn confines only to the limit duration.
iii. Time and resources constraints can be another factor that limited the scope of the study.

1.7 Organization of the study

This study has been divided into five chapters i.e., introduction, literature review, research methodology, analysis and discussion, and summary and conclusion. The first chapter contains introduction part of the study. It includes background of the study, statement of the problems, objectives of the study, hypothesis of the study, rationale of the study, limitations of the study and organization of the study. The second chapter contains theoretical review and empirical review. The third chapter deals with research framework and definition of the variables, research design, population and sampling, sources of data, data analysis tools. The fourth chapter presents the analysis of the data and discussion in the form of various tables and figures and the fifth chapter contains summary, conclusion and implication of the study. Finally, an extensive references and appendices are presented at the end of the study.

CHAPTER II

LITERATURE REVIEW

A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. Thus, a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to do (Sekaran, 2016).

2.1 Theoretical review

The theoretical framework is developed so that it serves as a foundation on which the entire research is based.

2.1.1 Meaning of investment

In the financial sense investment is the commitment of a person's fund to derive future income in the form of income, dividend premium, pension benefit, or appreciation, in the value of their capital. Examples include purchasing of shares, debentures, post office saving certificates, insurance policies are all investments in the financial sense such investment generates financial assets. Investment in the economic sense means the net addition to the economy's capital stock which consists of goods and services, that are used in the production of other goods and services. Examples include new constructions of plants and machines and inventories. Investment may be defined as the purchase by an individual or institutional investor of a financial or real asset that produces a return proportional to the risk assumed over some future investment period. Investment is the current commitment of the savings that compensates for the time involved, the expected rate of inflation and uncertainty involved. To stare in other words, an investment is a vehicle into which funds can be placed with the expectation that they will generate positive return or their value will be preserved or increased. Investment, in its broadest sense means the sacrifice of current

dollars for future dollars. Two different attributes are generally involving: time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain (Alexander, Sharpe & Bailey, 1998). Investment plays a very significant role in the financial performance of an organization. Organizations invest their resources in order to earn returns that will enable them enhance their financial performance (Loof & Heshmati, 2008).

2.1.2 Principle of investment

Generally, the investment depends upon principle of investment. All financial institution and intermediaries invest the collected fund under investment principles and policies. However, investment policy reformed and developed from the principle of investment. Therefore, so many determinants of principal of investment directly affect the investment policy. Generally, policy will be a plan or a course of future action that is proposed to adopt regarding a particular field of activities. For our purpose, investment policy will also be the plan or course of future action that is purposed to adopt regarding the investment. The investment policy may be different according to the objective and nature of the organization. But, all the investment policies must be balanced as of risk return character and suggested to invest at liquidity, safety and profitable sectors. While investment policies needed to be formed, the investors need to consider many factors. Usually these are the factors to be considered in investment planning decisions, security of principle stability of income and rate of return, marketability and liquidity (Shim & Siegel, 1989). Regarding the insurer investment policy and selection criteria, these are basic principle to be followed while investing the investible insurance fund.

a) Safety and Security

The safety and security principle is a primary and basic principle of the investment policy. The insurer should never invest its funds in these securities, which are subject to much depreciation and fluctuation because a little difference may cause great loss. Therefore, insurers perhaps invest their funds in fixed deposits and treasury bills of NRB. The collected premium is a liability for an insurer; therefore, they are always conscious on security and safety of the investment. American life insurance association also enforced the principle of safety. The basic principle for limiting the investment to those with the high

margin of safety not only is imposed on the companies by the system of state investments laws described presently, it has long been recognized as a paramount consideration by the insurance companies themselves. To obtain the security on investment insurer required sound matching in their investment portfolio. To maintain the secure investment holding, the insurer needs to analyses and concentrate on the secured lending. The secured investment provides the good / sweet return and liquid cash flow whenever required. In other instances, the safety of the investment assured by the high credit standing of the borrower as evidenced by his ability to meet the interest payments or to provide or continuous flow of dividends to investors. Further, the security of investment depends upon the legal claims of the lenders and value of the underlying security but also upon the borrower's 40 ability to manage its affairs efficiently and its willingness as well as ability to repay. Thus, safety and security principle is very important for an insurer.

b) Profitability

Generally, insurance companies or insurer obtains their name and era through paying claim in simple procedure and right time. In order to pay claim and maintain office expenses the fund is required. An insurance company can maximize its value of wealth and collection of fund through maximization of return on their investment. So, they must invest their fund where they can gain maximum profits. The insurer must earn at least the assumed rate of interest; otherwise, they will suffer loss. The investment should be made in such securities, which yield the highest return consistent with the principle of safety. The insurer can reduce his future premium by earnings higher interest and thus, will be able to increases his business. it has been realized that the safety and the profitability is important for insurer investment.

c) Diversification

An insurer should not lay all of the eggs in the same basket. This saying is very important to the insurer and so he/she should be always careful not to grant investment in only one sector. To minimize the risk, an insurer must diversify his/her investment in different sectors. Diversification of investment helps to sustain loss according to the law of average because if securities of a company deprived, there may be appreciation in the securities of other companies. In this way, the loss can be recovered and the company may able to earn

more profit. The diversification provides maximum security with high yield and better liquidity provided the diversification is done taking in to account of all these factors. Do not invest all the funds at one spread over the widest possible range to minimize unfavourable consideration and to gain favourable advantages. Under diversification, the law of average reduces the losses to minimum.

d) Liquidity

The principle of liquidity is important for the insurance investment. Insurer has no information about when they need to pay the claim of their client. So, at any unseen time there will be the requirement of fund. Thus, the insurer needed to invest under the principle of liquidity. Liquidity represents convertibility of investment into cash without undue loss of capital. The insurer needs to maintain working cash and bank balance order to carry out the normal transaction of receiving payments and making disbursements. Therefore, insurer needs to maintain the liquidity of their investment. The principle of liquidity is against the principle of profitability because the idle cash will earn nothing and invested cash will have no liquidity.

e) Marketability

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

2.1.3 Theories on investment

This part is concerned with various theories of investment.

a) Modern Portfolio Theory

Modern portfolio theory, relying on the work of Markowitz (1952) and the principals of the Capital Asset Pricing Model, suggests that investors can improve the performance of their portfolios by allocating their investments into different classes of financial securities

and industrial sectors that are not expected to react similarly if new information emerges. Solnik (1974) extends this theory to an international context and suggests that diversifying globally, as opposed to a strictly domestic portfolio, will lead to optimization of the risk return trade-off. Therefore, investors should allocate their money into assets exhibiting low return correlation. Aloui, Mohamed, Ben, and Khung (2011) examined the extreme correlations between the BRIC economies and the US, especially over 2007-2009.

Empirical evidence indicates that although BRIC markets have many features in common, they do not behave similarly in regard to their financial linkages to the US. In his study, Markowitz (1952) formally presented his view that although investors want to maximize returns on securities they also want to minimize uncertainty, or risk. These are conflicting objectives which must be balanced against each other when the investor makes his or her decision. Markowitz (1952) asserts that investors should base their portfolio decisions only on expected returns, i.e. the measure of potential rewards in any portfolio, and standard deviation, the measure of risk. As previously mentioned, Markowitz (1952) rejected the expected returns rule on the grounds that it neither acknowledged nor accounted for the need for diversification, contrary to his expected return variance of return‖ rule. In addition, he concluded that the expected return-variance of return rule not only revealed the benefits of diversification but that it pointed towards the right type of diversification for the right reason. It is not enough to diversify by simply increasing the number of securities held. If, for example, most of the firms in the portfolio are within the same industry they are more likely to do poorly at the same time than firms in separate industries. In the same way it is not enough to make variance small to invest in large number of securities. It should be avoided to invest in securities with high covariance among themselves and it is obvious that firms in different industries have lower covariance than firms within the same industry (Markowitz, 1952). Simply put, he concluded that by mixing stocks that flip tail and those that flip heads you can lower the risk of your overall portfolio. If investments are spread across unrelated stocks potential profit will maximize whether the economy is slowing down or growing. If then add more and more stock in different combinations, there will be what Markowitz (1952) called an efficient portfolio. An efficient portfolio is the portfolio which gives the highest profit with the least risk.

b) Capital Asset Pricing Model

The background of CAPM was the study of the influence of investor behaviour on asset prices. The result of that study was a theory of asset valuation in an equilibrium situation, drawing together risk and return, which is the CAPM. Several authors have contributed to the model, first and foremost Sharpe (1964), but also Treynor, Mossin, Litner and Black (1965). The CAPM is the first model to introduce the notion of risk into the valuation of assets. CAPM is in principle a method to calculate the rate of return which it is normal to demand of an asset of a certain nature. The search for the normal rate of return is divided into two parts according to CAPM. On the one hand, a risk-free rate is found. On the other hand, the rate of return on a risky asset is found, constituting the risk premium. In CAPM the standard deviation of a single asset does not matter greatly, rather the effect of the asset on the systematic risk of the portfolio to which the asset is added. The main concern is the conjunction between the rate of return of the efficient portfolio and a single asset.

c) Arbitrage Pricing Theory

Arbitrage pricing theory holds that the expected return of a financial asset is largely based on its beta. Beta is the measure of the relationship between company related factors which influence financial performance and the overall market in which the latter competes. Typically, a company which has a beta of one will reflect the market whereas a beta score of 0.75 means that a company will move up or down to the extent of 75 per cent of the corresponding market movement. The Arbitrage Pricing Theory was developed primarily by Ross (1976) heuristic argument for the theory is based on the preclusion of arbitrage. The APT is a substitute for the Capital Asset Pricing Model in that both assert a linear relation between assets expected returns and their covariance with other random variables. The covariance is interpreted as a measure of risk that investors cannot avoid by diversification. The slope coefficient in the linear relation between the expected returns and the covariance is interpreted as a risk premium. Such a relation is closely tied to mean-variance efficiency.

Arbitrage Pricing Theory can be useful if one is investing in a company and wanted to measure the historical share price sensitivity to huge market fluctuations typical during the onset of bull and bear markets. Based on an investor’s long-term and short-term goals

different investment strategies could be planned using APT as an exhibit. For example, if a company had a beta of one thereby likely to follow the market an investor anticipating a recession would hold off purchasing that stock if their goal was to invest their money for no longer than a few years and vice versa.

d) Resource Dependency Theory

This theory was developed by Pfeffer and Salancik (1978). The theory is based on the assumption that environments are the source of scarce resources and organizations are dependent on these finite resources for survival. A lack of control over these resources thus acts to create uncertainty for firms operating in that environment. Organizations must develop ways to exploit these resources, which are also being sought by other firms, in order to ensure their own survival. They established factors that have significant influence on the level of dependence an organization has on particular resources. The first factor relates to overall importance of the resource to the firm; second is the scarcity of the resource. The scarcer a resource is the more dependent the firm becomes. Finally, another factor influencing resource dependence is the competition between organizations for control of that resource. Together, all three of these factors act to influence the level of dependence that an organization has for a particular resource. Resource dependence theory also infers that a firm's strategic options are determined to a great extent by the environment. Since firms are dependent on the environment for resources, they need to enact strategies that would allow them to acquire these resources.

Insurance companies could invest in the stock market, and in fact they do, but investing in the stock market alone would be too risky because it's a cyclical market that swings from high bull market returns to considerable bear market losses. An insurance company has to know with a high degree of certainty that overall in any given year they're not going to absorb an unsustainable loss; therefore, stocks can only represent a relatively small portion of their investment portfolios. For life insurance companies, stock market investments represent around 5 percent of total holdings. Property and casualty insurance companies usually invest around 30 percent of holdings in common stocks. The appeal of bonds is that they provide a much more predictable future cash flow, but also investment grade bonds return markedly less on average than the long-term return of the stock market.

The main purpose of this literature review is to review the available literatures on investment policy of life insurance companies of Nepal including the available information of commercial study, different magazines, journal, and newspaper, book to collect the information about their subject matter. This process of studying different material, which is concerned with the selected topics of the research, is known as review of literature. Review of literature is useful in research because it provides the insight and general knowledge about the subject matter of research (Sekaran, 2016).

2.1.4 Investment policy of life insurance companies in Nepal

Life insurance business is a long period coverage insurance business. An insurer can mobiles the collected premium fund of the life insurance in long term. Because they do not require the funds in short term. An important attribute of the insurance fund is that they are of the long term nature. The claims against them by the policyholders materialize is a fairly regular pattern over time (Mahat, 1981). The chief objective in the management of the funds of life insurance companies is to have adequate funds with which to meet claims, which includes not only the death, disabilities and annuity payments called polices but also the demand for the cash surrender value by person cancelling policy their policies or for loans secured by the cash surrender value. This aspect of insurance business desires the investment policy, because the fund of life insurance is liability for an insurer. Therefore, insurer has responsibility to invest in profitable sector.

Life insurance is a main source of collection of the funds. It can collect large amount of fund, so insurer needs policy to invest these funds. The main objective in the management of the funds of life insurance companies is to have adequate funds with which to meet claims, which includes not only the death, disabilities, and annuity payments called for polices but also the demand for the cash surrender value by person cancelling their policies or for loans secured by the cash surrender value (Dowrie & Fuller, 1950). This aspect of insurance business desires the investment policy, because the fund of life insurance is liability for an insurer. Therefore, insurer has responsibility to invest profitable sector and securely also. Thus, the fundamental purposes of the life insurance investment are: - (a) to make possible fulfilment of contractual obligation to policyholders, (b) to make availability of life insurance protection at low cost as possible. To meet these objectives an investment

must give promise of (a) certain return on principle, (b) a stable and reasonable income yield. To attain the basic objective and strategy, the insurer should invest the life insurance fund under investment policy.

2.2 Review of related studies

A large number of studies relating to the insurance companies have been conducted. Among them, only few are related with the investment aspect of the insurance companies. Although there is many research conducted in insurance field no work in respect of relationship between investment and profitability has been found during this study. The summary of major articles on this subject matter is presented below.

Insurance Regulatory and Development Authority (Investment) (Amendment) Regulations (2001) life insurers must invest at least 50% of their funds in government-approved securities, with a minimum of 25% in government securities, a minimum of 15% in infrastructure and social sector, and the remaining 35% in other sectors that must adhere to exposure norms outlined in regulation 5. A maximum of 15% of the money, out of a total of 35 percent, can be invested in a sector that is not allowed. The insurance fund (at least 85 percent) in the approved sector has been carefully regulated by the regulation.

Adhikari (2000) conducted a study on the policies and practices of investing. This study aims to determine what are the most common plans utilized to invest in the insurance industry's premium collection. Both primary and secondary data sources were employed to perform this research. From 1993 to 1999, a six-year period was covered. Different financial and statistical tools were employed in the study, such as ratio analysis, cash flow, co-relation, standard deviation, and so on. The survey found that a large share of investment was made in the life and non-life insurance businesses' head Government Securities and Bank Fixed Deposit. The portfolio in the mandatory sector maintained a consistent return rate. However, in an average, the return from the Government Securities was highest and the return from the policy loan was lowest.

Shrestha (2002) studied on premium collection and investment position of National Life and General Insurance Company Limited. The study covered seven years, from 1994 to 2001. The primary objective of this study is to determine the status of National Life and

General Insurance Co. Ltd. in Nepal's insurance business. Shrestha analysed his study using both primary and secondary data. In order to do so, he employs a variety of financial and statistical methods, such as ratio analysis, trend analysis, co-efficient of correlation, mean, standard deviation, and T-test, among others. According to the findings, investment in various sectors has been shifting, with the largest percentage of life investment going to bank fixed deposits, which contributed 88.23 percent in the highest and 69.71 percent in the lowest.

Thapa (2002) conducted the comparative study on premium collection and investment pattern. The data for the study came from both primary and secondary sources. The study covered the years 1996 to 2001. The study's main goal is to see how well various insurance premiums are collected and invested. The results demonstrate that the insurance industry does not invest in the same percentage as other investment sectors and portfolios. The coefficient of correlation between premium and investment in the Nepalese insurance industry is very high and has a significant relationship.

Gautam (2009) studied the premium collection and investment pattern of Insurance Companies. Various data were collected from primary and secondary sources in order to obtain practical results. The data was analysed and interpreted in a descriptive manner, utilizing mathematical, statistical, and financial methods as needed. The study covered the years 2002 to 2007. The data show that insurance companies exclusively invest in a few industries. They've only put their money into risk-free industries like fixed deposits and government savings accounts. The net returns on some insurance companies are lower than the interest generated on their deposits. Similarly, as compared to other financial organizations such as banks and finance, insurance companies' EPS and MPS are insufficient. Even some insurance companies have a lower rate of return than fixed deposit interest, as well as a market share value lower than the called-up price. In order to grow those areas, better performance and outcomes should be displayed.

Charumathi (2012) studied the determinants of profitability of Indian Life Insurers for a sample of all the 23 Indian life insurers (including 1 public and 22 private firm). Leverage, size, liquidity, premium growth, underwriting risk, and capital are among the six independent variables examined. The size and liquidity of life insurers have a positive and

considerable impact on profitability, according to the research. The profitability of Indian life insurers has been impacted by debt, premium growth, and the increase of equity capital, while there is no indication that underwriting risk is related to profitability.

Khadka (2013) performed a comparative study on premium collection and investment pattern. This study's data is derived from both primary and secondary sources. The research was conducted from 2006 to 2012. The primary purpose of the study is to determine how far various insurance premiums have been collected and invested correctly. According to the research, premium collection rates in the Nepalese insurance industry have been fluctuating. Investment proportions from various investment sectors and portfolios have not been included by the insurance industry. In the Nepalese insurance industry, the coefficient of correlation between premium and investment is very high and has a significant relationship.

Nyanduko (2013) studied on the relation between investment & financial performance of insurance companies in Kenya. The goal of the study was to determine the association between insurance company investment and financial success in Kenya. The target population for the study is 45 insurance companies in Kenya. Secondary data from 32 insurance firms was collected from the overall population. She employed regression and correlation analysis for this study. The findings reveal that investments in real estate, certificates of deposit, government securities, corporate bonds, and stocks have a considerable impact on insurance company financial performance because the variables have a large impact on financial performance.

Joseph (2013) identified the determinants of profitability in the life insurance industry of Ghana. The study also examines the correlation between investment income, underwriting profit, and overall (total) net profit, which are the three indicators of an insurer's profitability. The financial accounts of ten life insurance companies were collected and analysed using panel regression for an eleven-year period from 2000 to 2010. According to the data, whereas gross written premiums have a positive association with an insurer's sales profitability, they have a negative relationship with investment income. Furthermore, the findings revealed that life insurers have been suffering significant underwriting losses as a result of overtrading and price undercutting. The findings also demonstrated a setting-

off rather than a complementing relationship between underwriting profit and investment income in terms of improving life insurers' overall profitability.

Panda (2013) analysed the investment pattern of LIC of India and its risk taking ability while investing in different segments. In the analysis of segment wise investment with Box Ljung statistics, the study used autocorrelation through linear trend analysis to keep current and previous years. The study's findings revealed a large increase in trends in the G-securities segment, S-securities plus housing/infrastructure, business sector, and project loan segments, whereas investment in housing and infrastructure alone showed no significant increase.

Dhakal (2015) studied on a study on investment policies and practices. This study was conducted to determine what the most common policies are for investing premiums collected by insurance companies. The data for this study came from both primary and secondary sources. From 2008 to 2014, a six-year period was covered. Ratio analysis, cash flow, correlation, standard deviation, and other financial and statistical methods were used by Dhakal. The majority of investment was found to be in the life and non-life insurance industries' head securities and bank fixed deposit sectors. The portfolio of the compulsory sector has a constant rate of return. However, the return on securities was the highest on average, while the return on the policy loan was the lowest. The industry's net investment income for life insurers was roughly three-quarters of the net premium collection, while the industry's net investment income for non-life insurers was around two-fifths of the net premium collection.

Njiiri (2015) explored the influence of investments on the financial performance of insurance companies in Kenya and found that investments made by insurer has a positive and significant impact on finance performance. Further the results of the study state that investment in real estate had the greatest impact, followed by government securities and bank deposits. Njiiri reasoned that the contribution by equities and corporate bonds was relatively weak which was attributable to the smaller portions invested in these asset classes and there relatively lower returns.

Hussain (2016) studied the major determinants of long-term investment of the non-life insurance industry of India. The annual financial statements of nineteen non-life insurance

companies covering a period of 5 years (2011-2015) were sampled and analysed through panel regression. The findings indicate that, as expected, highly liquid, highly profitable and large size insurance companies have invested more in long term than lowly liquid, lowly profitable and small size companies. The study also finds that insurance companies with higher risk retention ratio and higher leveraged ratio have invested less in long term than insurance companies with lower risk retention ratio and lower leveraged ratio.

Alqadi (2017) studied the impact of investment portfolio attractiveness on-commercial banks profitability. The studies have shown results: There is an effect for investment portfolio attractiveness elements (portfolio return, portfolio risk, risk aversion and utility value together) on both the return on investment and the return on equity, and. Investment in intangible assets, the corporate performance (measured by current ratio, return on assets ROA, asset turnover), and financial policy (measured by debt to equity ratio and dividend ratio) have significant effect on the market value of the corporations and there is a positive relationship between cash flow and firms investments, while some results showed that investment of the insurance company for the amounts of premiums accumulated leads to significant financial returns which contribute to the strengthening of its financial position, and increase the ability of the insurance company to reduce various costs and thus the possibility of reducing the insurance premium, which represents the price of insurance, putting the insurance company in a strong competitive position in comparison with competitive companies and both the political crisis and investments positively affect the profitability of the company, while the leverage ratio negatively affects the profitability.

Iregi (2017) studied the relationship between investment strategies and profitability in the insurance industry in Kenya. The study adopted a descriptive survey research design. This study used both primary data from the respondents of the research instruments and the secondary data available from the financial statements. The study took 50% of the population as the sample size. This yielded 22 insurance companies. Both qualitative and quantitative data was collected using a questionnaire that consisted of both open ended and close ended questions. Data was analysed using Statistical Package for Social Sciences and results presented in frequency tables to show how the responses for the various questions posed to the respondents. The study concluded that there is a positive and significant relationship between investment strategies and profitability, ROA and ROE of insurance

companies. Specifically, it was revealed that passive strategies are more superior to active strategies as they enhance profitability. The results imply that insurance firms invest in local stocks, international equity, cash equivalents, bonds and investment in associates and subsidiaries in an effort to diversify. Their portfolio However, the insurances firms do not put a significant proportion of the investments portfolio in real estate, futures and options perhaps because they of compliance with the regulatory framework governing the insurance sector. The study also concludes that insurance firms in Kenya use both passive and active investment strategies. The active strategies being used include; an aggressive strategy, a value strategy and moderate risk investment strategy. The passive strategies included; a conservative investment strategy and a high risk averse strategy. Specifically, it was revealed that passive strategies are more superior to active strategies as they enhance profitability.

Hailu (2018) studied the effect of investment on financial performance of life insurance companies in Ethiopia. The study used 11 years' data from nine selected insurance companies in Ethiopia from 2006-2016 year. It carried out by constructing a balanced panel regression model and random effect (RE) model of the secondary data obtained from the audited annual report of sampled insurance companies in Ethiopia. The overall result obtained from the regression model indicates that investment has an effect on performance of insurance companies in Ethiopia. The dependent variables used to measure insurance performance was return on asset and in order to achieve the objectives, the study used four independent variables i.e., equity investment, fixed asset investment, fixed time deposit and Government securities. Insurance size and liquidity ratio were also taken into consideration as a control variable. From the regression result, Government securities, fixed asset investment, insurance size and liquidity ratio had a positive and significant effect on performance of insurance companies. Fixed time deposit had positive but insignificant effect on performance of insurance companies. Equity investment had negative and insignificant effect on performance of insurance companies.

Shahi (2018) studied on premium collection and investment pattern of non-life insurance companies in Nepal. This study uses both primary and secondary source of data. The data has been processed and analysed in descriptive way by using mathematical tools, statistical tools and financial tools wherever necessary. The results indicate that insurance companies

invest their funds in only a few industries. They consider fixed deposits and savings funds as safe and risk-free investments. Some insurance businesses' net returns are lower than the interest earned on their deposits. Similarly, EPS of insurance companies are not satisfactory in response to other financial institution like bank and finance. Even some insurance companies have lower rate of income than interest received from fixed deposit.

Poudel (2019) studied the effect of ownership as well as various firm-specific factors that determine the profitability of insurance companies. The analysis found that tangibility and liquidity have a negative relationship with return on asset (ROA). Firm size, age, and leverage, on the other hand, had a positive correlation. Similarly, the study found a negative correlation between liquidity and return on equity, as well as a positive correlation between business size, age, leverage, and tangibility. According to the study's regression analysis, firm size is the most important factor in influencing insurance company profitability.

Joo and Hussain (2019) investigated the factors that impact on profitability of life insurance companies in India. The secondary data for the ten-year panel was collected between 2005 and 2015. According to the findings, growth and tangibility are important factors in determining profitability as evaluated by ROA. Leverage, commission ratio, and scale, on the other hand, have no bearing on profitability as assessed by ROA. Investigations on the elements that influence insurance company profitability have gotten a lot of press around the world. However, as the aforementioned research shows, there is no unanimity on the factors that influence profitability. With the diversity of financial institutions in different countries, the impacting elements are subject to change.

Bhattarai (2020) examined the effects of capital structure on profitability of insurance companies in Nepal. Data were collected from the annual report of the respective insurance companies' web site. The panel data of 14 Nepalese insurance companies from 2007 to 2016, leading to a total of 126 observations. The data were analysed using pooled OLS model, random effect model and fixed effect model. The study has employed descriptive and causal research designs adopting the regression model. The study has been return on assets as dependent variable whereas total debt ratio, equity to total assets, leverage, firm size, liquidity ratio and assets tangibility are independent variables. The result concluded

that equity to total assets, leverage, and assets tangibility effects the profitability in Nepalese insurance companies' cases.

Hamal (2020) studied impact of firm specific factors on financial performance of life insurance companies in Nepal. The study has employed descriptive and causal research designs adopting the regression model. The ten-year panel secondary data were taken from 2009-2019. The study concludes that the most influencing factors for the financial performance in Nepalese life insurance companies are firm size and long-term investment. Along the same line, overinvestment in long-term investments should be critically considered as it can have adverse effect on future profitability of life insurance companies. Life insurance companies should increase their size only after careful examination over financial performance as it can result in diseconomies of scale and reduce the firm's profitability. Further, it also concludes that the financial performance decreases moderately with the increase in short term debt and operational years in Nepalese life insurance companies. Thus, in order to optimize profit, the companies should focus on the management of their total asset, long-term investment, current assets and current liabilities. The study sheds light upon the fact that life insurance companies that operate in Nepal benefit more when they maintain liquid assets.

Dhiab (2021) studied the determinants of insurance firm's profitability of Saudi insurance market between 2009 to 2017 with sample of 20 insurance companies. The findings suggest that the growth rate of written premium, the tangibility ratio and the fixed-assets ratio are the main factors affecting positively the profitability of Saudi insurance companies. Moreover, while the company size and the liquidity ratio are positively associated with profitability, their impacts are not statistically significant. On the contrary, the loss ratio, liabilities ratio, insurance leverage ratio, and to a less extent, the company age has negative effects on the profitability of Saudi insurance companies.

Ghimire (2021), analysed current status of investment portfolio structure and investment practices adopted by both life and non-life insurance companies and compare it with norms of directives. The findings revealed that insurance companies prioritized investing in fixed deposits. Bank deposits account for more than 70% of total investment, followed by government securities, preference shares, debentures, and other sectors, in that order. The

insurance company made a bet on the safest sector. He also argued that prudential supervision is just as important for financial institutions as it is for banks. The regulatory authority has the authority to issue regulations in one hand, but they are not free from the task of monitoring and supervising whether the regulations are being followed correctly by companies. Serious violations of guidelines are punishable, but authorities must create an early warning system that makes it possible to take preventative measures before taking severe legal action.

Kharel (2021) examined the contribution of insurance industries in economic growth of Nepal using premium and investment. The findings revealed that the amount of insurance premium collected has been steadily increasing, and so has the contribution of insurance premium to GDP. Insurers have started putting their investable funds into long-term investments. Bonds, debentures, fixed deposits with banks and financial organizations, shares, and loans secured by insurance policies are all examples of government securities. Life and non-life insurance firms' investable funds have been steadily expanding. It has been mentioned that insurance plays an important part in economic development. The insurance company has made a substantial contribution to economic growth, efficiently allocating resources, managing risk, and mobilizing long-term savings, and the insurance sector, in order to achieve the stated objectives, should function on a financially sound foundation.

Marjanovic and Popovic (2021) focused on the factors influencing the profitability of 14 insurance companies in the Republic of Serbia between 2006 and 2016. The authors conclude that some features of a corporation, such as its age, capital adequacy, investment performance, and market share, have statistically significant effects on the firm's success as evaluated by the ROA. It's worth mentioning that there have been very few recent studies on the profitability of Saudi insurance companies.

The summary of the major articles on this subject matter is presented in Table 1.

Table 1

Summary of empirical studies

Study	Major Findings
Adhikari (2000), Nepal	Identified the main policies to be used to invest the collected premium of insurance industries.
Shrestha (2002), Nepal	Studied the premium collection and investment position of National Life and General Insurance Company Limited.
Thapa (2002), Nepal	Studied the comparative study on premium collection and investment pattern.
Gautam (2009), Nepal	Identified the premium collection and investment pattern of Insurance Companies.
Charumathi (2012), India	Found the determinants of profitability of Indian Life Insurers.
Khadka (2013), Nepal	Studied comparative study on premium collection and investment pattern.
Nyanduko (2013), Kenya	Studied the relationship between investment and financial performance of insurance companies in Kenya.
Joseph (2013), Ghana	Identified the determinants of profitability in the life insurance industry of Ghana.
Panda (2013), India	Examined the investment pattern of LIC of India.
Dhakal (2015), Nepal	Studied investment policies and practices in Nepal.
Njiiri (2015), Kenya	Examined the influence of investments on the financial performance of insurance companies in Kenya.

Hussain (2016), India	Found the major determinants of long-term investment of the non-life insurance industry of India.
Alqadi (2017), Jordan	Identified the impact of investment portfolio attractiveness on-commercial banks profitability.
Iregi (2017), Kenya	Studied the relationship between investment strategies and profitability in the insurance industry in Kenya.
Hailu (2018), Ethiopia	Identified the effect of investment on financial performance of life insurance companies in Ethiopia.
Shahi (2018), Nepal	Studied the premium collection and investment position of non-life insurance companies in Nepal.
Joo and Hussain (2019), India	Identified the factors that impact on profitability of life insurance companies in India.
Poudel (2019), Nepal	Found the effect of ownership as well as various firm-specific factors that determine the profitability of insurance companies.
Bhattarai (2020), Nepal	Examined the effects of capital structure on profitability of insurance companies in Nepal.
Hamal (2020), Nepal	Identified the impact of firm specific factors on financial performance of life insurance companies in Nepal.
Dhiab (2021), Saudi Arab	Studied the determinants of insurance firm's profitability.
Ghimire (2021), Nepal	Examined the investment portfolio of insurance companies.
Kharel (2021), Nepal	Studied the contribution of insurance industries in economic growth of Nepal.

Marjanovic and Popovic (2021), Serbia	Studied the factors influencing the profitability of insurance companies in the Republic of Serbia.

2.3 Research gap

There is long gap between the previous works and this study. This study studies four life insurance companies and ten years' data, which are selected different from previous researchers. They did not focus on comparable tools likes ROE but this study use ROE. Previous studies focused on premium collection and investment patterns while this study based on investment policy of life insurance companies only. Previous studies used only financial tools and ignored statistical tools but this study used both financial and statistical tools. Previous studies were based on descriptive way only but this study used descriptive and analytical basis. Therefore, there is a research gap, as no previous studies examined short-term and long-term investment and profitability measured in terms of ROE, and more so on in Nepalese insurance sector.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology describes the methods and process applied in the entire aspect of the study. It refers to the various sequential steps (along with a rational of each step) to be adopted by a researcher in studying a problem with certain objectives in view. Thus, the overall approach to the research is presented in this chapter (Sekaran, 2016). These study aims at presenting, evaluating and finding about the investment policy, along with investment return of life insurance companies. The study has drawn an actual scenario of investment policy of Nepalese life insurance industry. This chapter has been divided into five sections. First section deals with the brief description of research design, while second section describes selection of population and sample of study. Section three explains the nature and sources of data employed. Fourth section deals with the method of analysis and finally, fifth section deals with research framework and definition of variables.

3.1 Research design

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework for the dissertation that stipulates what information is to be collected, form which sources and by what procedures (Sekaran, 2016). The research design adopted in this study consists of descriptive and causal comparative research designs to deal with the various issues raised in the study. The major purpose of using descriptive research was to describe, explain and validate findings. This research design was carried out to ascertain and describe the characteristics of variables being studied. Causal comparative also known as explanatory research was also conducted in order to identify the extent and nature of cause and effect relationship between the variables. This research design is selected for the study to determine how dependent variables are influenced by the change in independent variable (Sekaran, 2016).

3.2 Population and sample

The listed life insurance companies are the population for this study. The method of

selecting a small portion of the population to draw conclusion about the characteristics of the population is known as sampling. Samples are drawn as per the convenience to represent the population. So precisely saying, out of 40 insurance companies, 19 life insurance companies are the population of this study and among them, only four have been chosen as samples. For selecting the samples, the judgemental sampling method was adopted by considering the nature and types of insurance facilities. The present study has drawn the judgemental sample based on the two major criteria: one, the life insurance companies established between the year 2000 and 2008; and two, the life insurance companies established in the private sector, that is, state-owned life insurance companies were not covered. Consequently, four insurance companies: Met Life- American Life Insurance Company Limited (ALICO), Asian Life Insurance Company Limited (ALICL), Life Insurance Corporation Nepal Limited (LICN) and Surya Life Insurance Company Limited (SLICL) have been chosen as the sample. The data from these insurance companies have been analysed in accordance with the study objectives.

3.3 Nature and sources of data, and the instrument of data collection

This study is based on the secondary source of data. Secondary sources of data consist of information that has been gathered and often interpreted by other researchers and recorded in books, articles, and other publication (Sekaran, 2016). In this study, required information has been collected from the official websites of selected insurance companies and Beema Samiti, the regulating authority of insurance businesses in Nepal. In this study, four insurances company's secondary data are analysed for the purpose of concluding the result accordance to the objectives.

3.4 Method of analysis

In order to get the results from this research the various collected data from secondary sources have been coded and tabulated in required form. Tabulated data has been processed and analysed in descriptive way by using appropriate statistical tools and financial tools wherever necessary. In addition to the descriptive statistics, the present study has also used inferential statistical tools like correlation and regression to analyse the association between

the investments and profitability of the selected private-sector life insurance companies of Nepal.

Model specification

Since this study is based on causal comparative research design, a regression based model has been formulated. It is formulated as:

$ROE = \alpha + \beta_1 LnSTI + \beta_2 LnLTI + e_i$

Where,

ROE = dependent variable

LnSTI = independent variable one (logarithm of STI)

LnLTI = independent variable two (logarithm of LTI)

β_1 = coefficient of independent variable one

β_2 = coefficient of independent variable two

e_i = error terms

3.5 Research framework and definition of the variables

A research framework has been used to help focus on the variables of the study. Short term investment and long term investment are the independent variable whereas Return on Equity is the dependent variable. The research framework of the study is in Figure 1.

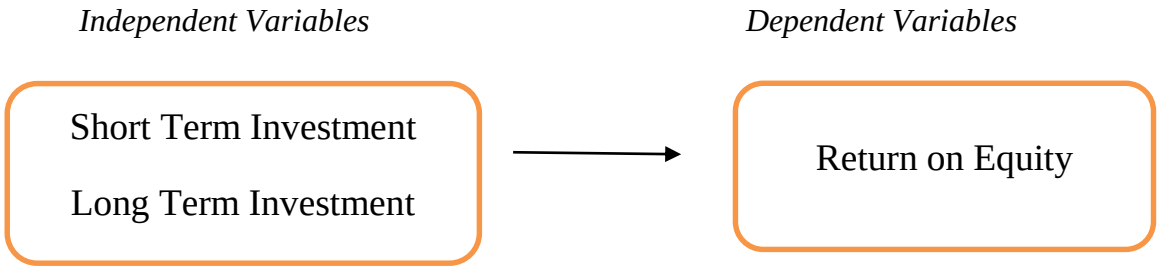

Figure 1. Research framework of the study

From the research framework and objectives of the study, it is clear that the study is aimed at determining the impact of variables namely short term and long term investment towards return on equity. The definitions of each variable used in the study are as follows:

3.5.1 Short term investment

A short-term investment, also called a temporary investment or marketable security, is a debt or equity security that is expected to be sold or converted into cash in the next 3 to 12 months. In other words, it's a stock or bond that management holds to earn a quick return and plans on selling in the current accounting period. Short-term investments have two main requirements. First, they must readily be convertible to cash. This means that obscure investments in privately held companies couldn't be classified as a short-term investment. It is the holdings a company owns but intends to sell within a year. If it can't be sold easily and readily, it isn't a marketable security. Insurance companies make short-term investments in bonds, debentures, stock investments, citizen investment trusts, government securities, fixed deposits etc.

3.5.2 Long term investment

Long-term investments are non-current assets that are not used in operating activities to generate revenues. In other words, Long term investments are assets that are held for more than one year or accounting period and are used to create other income outside of the normal operations of the company. Long-term investors are generally willing to take on more risk for higher rewards. Notes receivable, stocks, and bonds are typically considered to be long-term investments if management plans to keep them for more than one year. None of these assets are traditionally used in operating activities. For example, a company doesn't typically purchase bonds as part of its operations unless it's an investment firm. A purchase of bonds would be considered an investment for a manufacturer. Companies can also invest in assets that could be used in operations but are held as an investment. Insurance companies make long-term investments in bonds, debentures, stock investments, citizen investment trusts, government securities, fixed deposits etc.

3.5.3 Return on equity

This study employed ROE to measure the profitability of life insurance companies. Return on equity is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets. ROE is considered a measure of the

profitability of a corporation in relation to stockholders' equity. Return on equity assesses how profitable the owner's money was managed. Since, Management reports directly to the owners, maximizing return on equity while maintaining acceptable risk levels is an essential and proper concern. Return on equity is the most popular statement of the ROI principle applied to company performance at the top level of management and outside the company. Hence, the study use ROE as dependent variable.

CHAPTER IV

RESULTS AND DISCUSSION

This study aims to explain impact of short-term and long-term investment on profitability of life insurance companies in Nepal. This chapter includes the presentation and analysis of collected data. It intends to analyse the data collected and present the finding of the analysis. It employs various statistical tools and techniques to find the objective of the study. It presents the results and findings based on descriptive and inferential analysis.

4.1 Analysis of data

This study primarily relies on analysis of secondary data to derive the empirical findings on the study. Data that has been collected are shown in figures for greater visibility and clarity. The data has been presented with limited time period of last ten years from 2009 to 2019. And it has been using mean, standard deviation, coefficient of variation, correlation and regression analysis. For analysing the relationship between independent variable and dependent variable correlation and regression analysis were used. The sources of tables presented below are output from annual reports of selected companies.

The data related to short term investment, long term investment and ROE were collected and analysed through various methods in order to answer the various research questions. Research question is the question that a research project seeks out to answer. Data are being analysed in order to know the significant or insignificant effect of short-term and long-term investment on profitability and to know the significant or insignificant relationship between short-term and long-term investment and profitability. The short term and long term investment and ROE of year 2009 to 2019 are presented below with figures.

4.1.1 Profitability position of selected life insurance companies

Profitability is ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company's capability of generating profits from its operations. Profitability is one of four building blocks for analysing financial

statements and company performance as a whole. The other three are efficiency, solvency, and market prospects. Investors, creditors, and managers use these key concepts to analyse how well a company is doing and the future potential it could have if operations were managed properly.

The profitability of a life insurance company is critically dependent on its operating and financial activities. Operating activities consist of insurance operations such as selling new policies and providing services to existing policies. Financial activities consist of investing the premiums of policies in viable opportunities. The profits from operating activities can be calculated as the difference between premium income and the total cost of operations, whereas the profit from financial activities is calculated as the difference between actual returns on investment and the returns credited to the policies. Success in the life insurance industry depends on the insurer's ability to control costs and on various intangibles, such as clientele and business-risk preferences, marketing skills, reputation, and perceived quality of services.

Return on equity of life insurance companies

Return on equity measures how efficiently a firm can use the money from shareholders to generate profits and grow the company. Unlike other return on investment ratios, ROE is a profitability ratio from the investor's point of view—not the company. In other words, this ratio calculates how much money is made based on the investors' investment in the company, not the company's investment in assets or something else.

Table 2

Return on Equity (%) of Selected Life Insurance Companies

Year	*Life Insurance Companies*			
	ALICL	*LICN*	*ALICO*	*SLICL*
2009/10	16.14	-2.32	7.18	3.3
2010/11	8.76	-10.26	49.56	4.34
2011/12	18.23	42.04	17.63	6.99
2012/13	16.67	41.16	119.93	8.74

2013/14	9.1	19.69	16.711	7
2014/15	6.174	19.778	11.47	3.417
2015/16	10.072	20.517	36.58	17.494
2016/17	4.904	8.017	33.12	14.887
2017/18	-2.105	54.386	28.53	14.286
2018/19	8.786	11.134	23.76	19.612
Mean	9.6731	20.4142	34.447	10.0066
S.D	6.1447	20.4142	32.592	6.0618
CV	0.6352	1	0.9461	0.6058
Minimum	-2.105	-10.26	7.18	3.3
Maximum	18.23	54.386	119.93	19.612

Note: From various year annual report of ALICL, LICN, ALICO and SLICL.

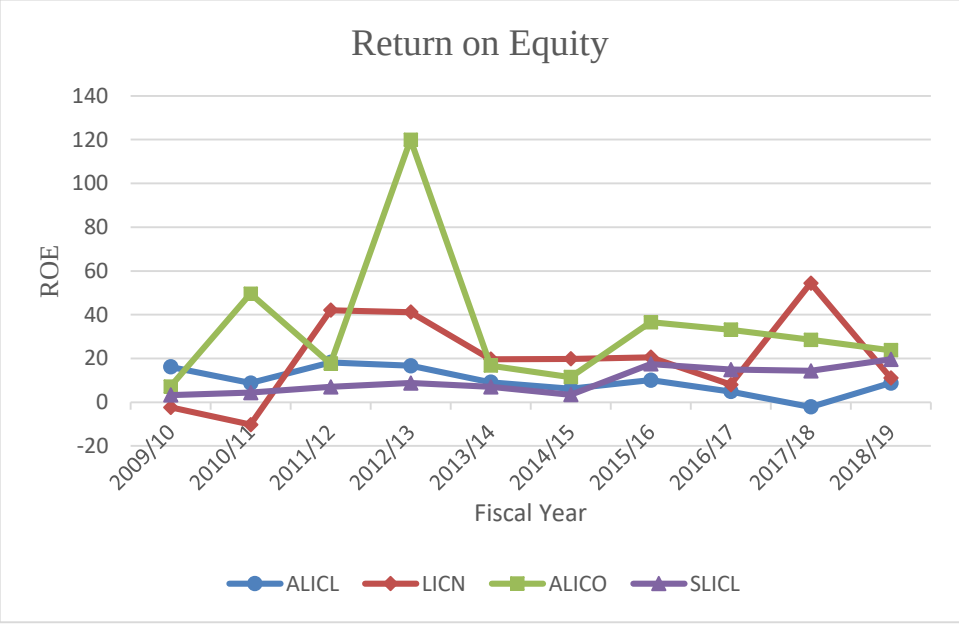

Figure 2. Returns on Equity of selected Life Insurance Companies

The table and figure shows the rate of return on equity of four life insurance companies. In 10 years' period, Met-Life American Life Insurance Company generated higher average Return on Equity of 34.447% and Asian Life Insurance Company generated least average Return on Equity of 9.6731% among the four selected insurance companies while Surya

Life Insurance company generated 10.0066% and Life Insurance Corporation Nepal has generated 20.4142% in average. The percentage return on equity is showing fluctuating trend for all companies during 10 years' period. Asian Life Insurance Company has highest ROE of 18.23% in FY 2011/12 and lowest ROE OF -2.105% in FY 2017/18. Life Insurance Corporation Nepal has highest ROE of 54.386% in FY 2017/18 and lowest ROE of -10.26% in FY 2010/11. Met-Life American Life Insurance Company has highest ROE of 119.93% in FY 2012/13 and lowest ROE of 7.18 in FY 2009/10. Surya Life Insurance Company has highest ROE of 19.612% in FY 2018/19 and lowest ROE of 3.3 in FY 2009/10.

Among these four companies, Surya Life Insurance Company have fluctuating return with minimum risk of CV value 0.6058 while Asian Life Insurance Company and Met-Life American Life Insurance Company also have fluctuating return with slightly moderate risk with CV value of 0.6352 and 0.9461 respectively. Life Insurance Corporation Nepal also has fluctuating nature but comparing to others it has high value of CV with 1 which means risk of this company is higher in comparison to other companies.

4.1.2 Investment position of life insurance companies

Insurance companies are considered as the non-banking financial institutions. However, more of their presence in the economy, the higher the possibility of economic development because they are the institutional investors. As institutional investors, insurance companies may act as principal for their own account, and thereby invest the assets of the insurance company in a wide array of financial instruments i.e. share, debenture, etc. in order to produce sufficient income to meet their obligations in the form of promised insurance benefits (SEBON, 2017). They basically invest in corporate securities, government bonds, shares, citizen investment fund and in commercial and development banks as fixed deposit.

Short term investment position of insurance companies

A short-term investment is a debt or equity security that will be sold or converted to cash within three to twelve months. Insurance companies make short-term investments in bonds, debentures, stock investments, citizen investment trusts, government securities, fixed deposits etc.

Table 3

Short Term Investment Position of Selected Life Insurance Companies (Amount in million)

Year	*ALICL*		*LICN*		*ALICO*		*SLICL*	
	STI	*LnSTI*	*STI*	*LnSTI*	*STI*	*LnSTI*	*STI*	*LnSTI*
2009/10	686.9	20.34	976.8	20.7	3079.5	21.84	253.7	19.35
2010/11	1040.2	20.76	865	20.578	2294.6	21.55	288.3	19.47
2011/12	1661	21.23	917	20.637	1935.5	21.38	142.4	18.77
2012/13	2586	21.67	3403.5	21.948	3738.2	22.04	474.5	19.97
2013/14	3538	21.98	7041.9	22.675	6436.5	22.5	554.2	20.13
2014/15	377.6	19.74	12890.8	23.28	9476.6	22.58	862.9	20.57
2015/16	313.2	19.56	18170	23.62	9634.3	22.99	1568.7	21.17
2016/17	222.9	19.22	10063.5	23.03	11526.4	23.16	1428.4	21.07
2017/18	335.3	19.63	7355.3	22.719	14738.9	23.41	1820.5	21.32
2018/19	429.73	19.87	7920.5	22.793	15904.1	23.48	3521.9	21.98
Mean	1119.1	20.40	6960.4	22.198	7876.5	22.54	1091.6	20.38
S.D.	113439.1	0.96	5712.3	1.16	5155	0.78	1040.8	1.01
C.V.	1.012	0.04	0.821	0.05	0.654	0.03	0.953	0.04
Minimum	222.9	19.22	865	20.57	1935.5	21.38	142.4	18.77
Maximum	3538	21.9	18170	23.62	15904.1	23.49	3521.9	21.98

Note: From various year annual report of ALICL, LICN, ALICO and SLICL.

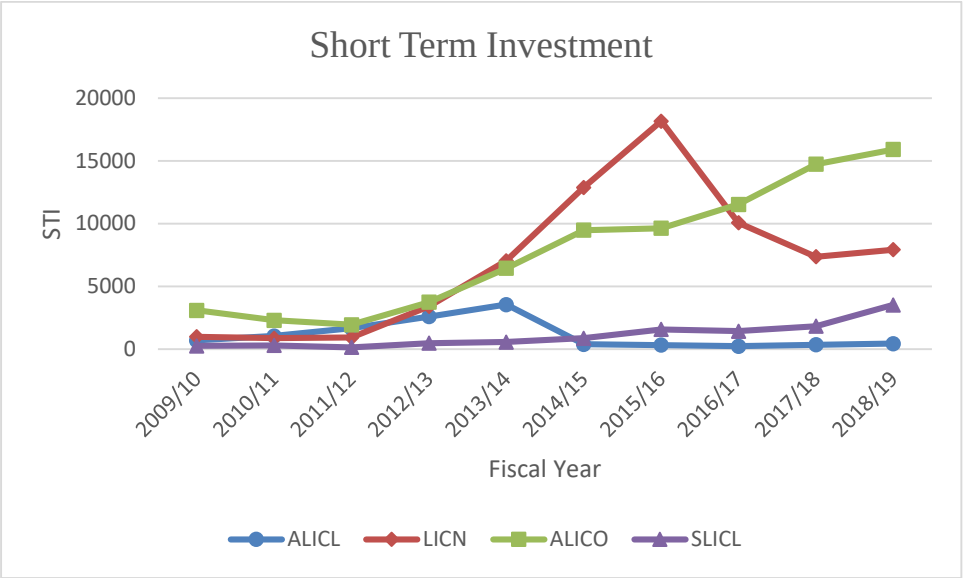

Figure 3. Short Term Investment of selected insurance companies.

The table and figure shows short term investment of selected insurance companies in 10 years' period. Investment in short term investment is fluctuating for ALICL and LICN whereas SLICL and ALICO are in increasing trend. The average amount of short-term investment in 10 years' period was highest for Met-Life American Life Insurance Company amounting Rs. 7.87 Billion and lowest for Surya Life Insurance Company amounting Rs. 1.09 Billion. Asian Life Insurance Company has lowest short term investment of Rs 222.94 Million in FY 2016/17 and highest in FY 2013/14 of Rs 3.53 Billion. Life Insurance Corporation Nepal has highest short term investment of Rs 18.17 Billion on FY 2015/16 and lowest of Rs 864.96 Million in FY 2010/11. Met-Life American Life Insurance Company has the highest short term investment of Rs 15 Billion on FY 2018/19 and lowest of 1.93 Billion in FY 2013/14. Surya Life Insurance Company has the highest short term investment of Rs 3.52 Billion in FY 2018/19 and lowest of 142.43 Million in FY 2016/17. Since, ALICO has lower coefficient of variation with 0.6793 which means it has maintained the consistency of short-term investment but least consistent was ALICL due to having higher coefficient of variation with 1.102 value among the four life insurance companies.

Long term investment position of insurance companies

Long-term investments are assets that a company intends to hold for more than a year. Insurance companies make long-term investments in bonds, debentures, stock investments, citizen investment trusts, government securities, fixed deposits etc.

Table 4

Long Term Investment Position of Selected Life Insurance Companies (Amount in Million Rupees)

Year	*ALICL*		*LICN*		*ALICO*		*SLICL*	
	LTI	*LnLTI*	*LTI*	*LnLTI*	*LTI*	*LnLTI*	*LTI*	*LnLTI*
2009/10	358.6	19.70	3686.6	22.028	1642.5	21.219	157.8	18.877
2010/11	672.3	20.33	5418.2	22.413	3218.2	21.892	244.5	19.314
2011/12	807.5	20.51	7186.4	22.695	4767.5	22.285	541	20.109
2012/13	916.9	20.64	7300.2	22.711	3636.8	22.014	385.9	19.771
2013/14	985.8	20.71	6596.3	22.609	2574.6	21.6690	600.9	20.213
2014/15	5240.1	22.38	5042.8	22.341	758.1	20.4463	750.5	20.436
2015/16	6992.3	22.67	5489.3	22.426	2173.4	21.4995	107.4	18.492
2016/17	8815.6	22.90	20397.7	23.738	2173.4	21.4995	1815.2	21.319
2017/18	12252.2	23.23	29705.7	24.114	1761.3	21.2893	2841.6	21.76
2018/19	16241.1	23.51	37906.4	24.358	2735.5	21.7296	2930.2	21.798
Mean	5328.2	21.65	12873	22.944	2544.1	21.554	1037.5	20.210
S.D.	5648.	1.4088	12134.5	0.8153	1131.4	0.5077	1088	1.1529
C.V.	1.06	0.065	0.9426	0.0355	0.4447	0.0236	1.0487	0.057
Minimum	358.6	19.69	3686.6	22.028	758.1	20.446	107.4	18.492
Maximum	16241.1	23.51	37906.4	24.358	4767.5	22.285	2930.2	21.798

Note: From various year annual report of ALICL, LICN, ALICO and SLICL.

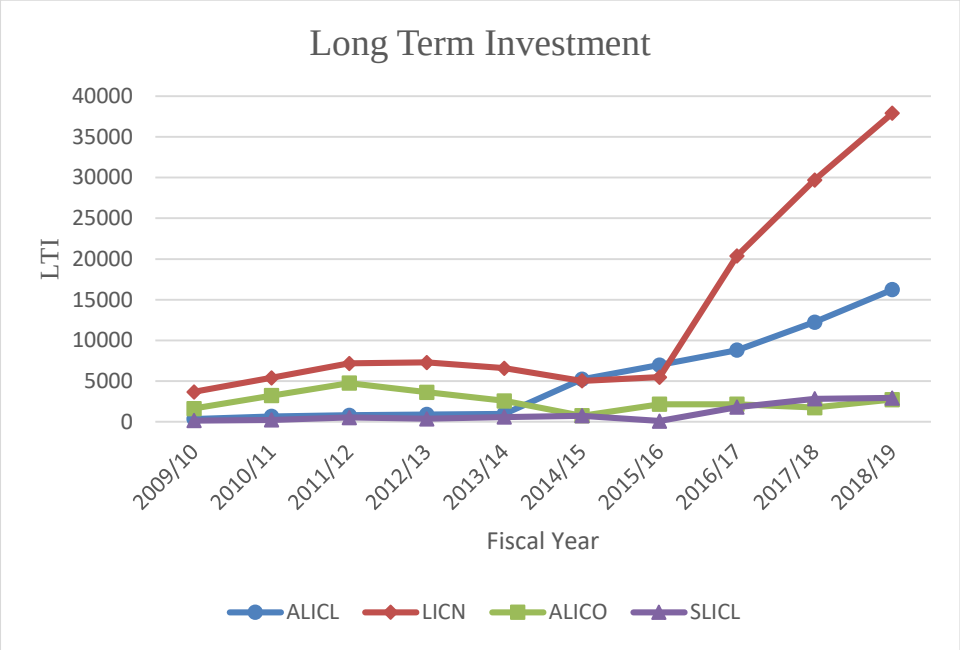

Figure 4. Long Term Investment of selected insurance companies

The table and figure shows long term investment of selected insurance companies in 10 years' period. All four life insurance companies were observed to increase their long term investments in most of the years except in some years. The average amount of long-term investment in 10 years' period was highest for Life Insurance Corporation Nepal amounting Rs. 12.87 billion and lowest for Surya Life Insurance Company amounting Rs. 1.03 billion. Asian Life Insurance Company has lowest long term investment of Rs. 358.61 million in FY 2009/10 and highest in FY 2018/19 of Rs 16.24 Billion. Life Insurance Corporation Nepal has highest long-term investment of Rs 37.90 billion on FY 2018/19 and lowest of Rs 36.86 billion in FY 2009/10. Met-Life American Life Insurance Company has the highest long-term investment of Rs 4.76 billion on FY 2011/12 and lowest of 758 million in FY 2015/16. Surya Life Insurance Company has the highest long term investment of Rs 2.93 million in FY 2018/19 and lowest of 107.42 million in FY 2015/16.

The consistency of short-term investment was more for ALICO with 0.444 coefficients of variation but least consistent was ALICL due to having 1.0600 CV value among the four life insurance companies.

4.1.3 Descriptive statistics of the studied variables

The descriptive statistics (mean, standard deviation, coefficient of variation, minimum and maximum values) of the dependent and independent variables for four life insurance companies from year 2009 to 2019 are presented below.

Table 5

Descriptive Statistics of all selected insurance companies

Variables	*N*	*Mean*	*Standard Deviation*	*Coefficient of Variation*	*Maximum*	*Minimum*
ROE	40	18.635	21.5197	1.1548	119.93	-10.26
LTI	40	21.255	1.599	0.075	24.358	18.492
STI	40	21.383	1.385	0.064	23.6230	18.774

Note: Calculated from annual report of sample insurance companies.

This table demonstrate the mean, standard deviation, coefficient of variation, minimum and maximum values of dependent and independent variables. The data were derived from the annual report of sample companies. The study has used 10 years' data from 2009 to 2019 of four insurance companies. The profitability measured (ROE) shows the average profit of selected insurance companies over the last ten years. The average mean of ROE is 18.635 which ranges from 119.06 to -10.26 with standard deviation of 21.519. The mean value of LTI is 21.55 with standard deviation, minimum and maximum of 1.599, 18.492 and 24.358 respectively. Similarly, STI mean value is observed to be is 21.3830, which ranges from 18.774 to 23.623 with standard deviation of 1.385. The coefficient of variation of ROE is 1.1548, LTI is 0.075 and STI is 0.064 respectively. These data are analysed with the help of software. It indicates the mean, standard deviation, CV, maximum and minimum of all the variables.

4.1.4 Correlation analysis

By this statistical tool, the degree of relationship between two variables is identified. It helps to determine whether a positive or a negative relationship exists between the variables. The value of coefficient of correlation always lies between +1 and -1. A value of -1 indicates a perfect negative relationship between the variables and a value of +1 indicates

a perfect positive relationship. A value of zero indicates that there is no relation between the variables.

Correlation analysis is preferred in this study to identify the relationship between investment and profitability. Correlation analysis is conducted for the whole sample. The sample includes 4 insurance companies and covers the period of 10 years from 2009 to 2019. The table below shows the correlation between the dependent and independent variables.

Table 6

Correlation coefficient of ROE, LTI and STI of all selected companies

	ROE	LTI	STI
ROE	1		
LTI	0.085 (0.600)	1	
STI	0.387* (0.010)	0.154	1

*Correlation Coefficient is significant at the 0.01 level (2-tailed).

Note: Calculations based on researcher's survey, 2021

The table indicates the relationship of independent variables and dependent variables. Here, the independent variables are LTI and STI whereas dependent variable is ROE. Table 6 shows the impact of LTI and STI on ROE.

The table shows the result from the correlation analysis of STI and LTI towards ROE. It can be observed that there exist positive and significant relationship between STI and ROE. The result shows the 99% of confidence level with correlation coefficient of 0.387. This means, the change in one variable is correlated with change in the second likewise increase or decrease in one variable do significantly relate to increase or decrease in second variables. Likewise, LTI also has positive and insignificant relationship toward ROE with correlation coefficient of 0.085 which means there is strong relationship between the variables. Therefore, there is no statistically significant correlation between return on equity

and independent variables LTI which means increase or decrease in one variable do not significantly related to increase or decrease in other variables.

4.1.5 Regression analysis

Regression analysis helps to find out the impact of independent variables on the dependent variables. In this study, regression analysis is done for the different investment towards profitability. Regression models are conducted in order to know the impact of different independent variables on dependent variables.

Regression model

Regression model is an extension of simple linear regression. It is used to predict the value of dependent variable based on the value of two dependent variables.

The following table shows the results of regression analysis for the period of 2009 to 2019 by using the following regression model. Here, Dependent variable is ROE and independent variables are STI and LTI.

Table 7

Regression results of ROE from STI and LTI

(Dependent Variable ROE: Profitability)

Variable	Coefficient	t- Value	Significance
Constant	-74.899	-1.224	0.229
LTI	1.997	0.979	0.334
STI	6.359	2.703	0.010*
R-squared	0.298		
Adjusted R-squared	0.281		
F Value	3.817		0.030*

*Regression coefficient is significant at the 0.01 and 0.05 level (2-tailed).

Note: Calculations based on researcher's survey, 2021

Based on the data of 10 fiscal years, the analysis shows that the regression equation fits well, as the model fitted well into the data as the F-value (3.817) is statistically significant (p=0.03). Therefore, STI and LTI, the independent variables, determine the variations in ROE, the dependent variable.

STI and ROE have a statistically significant relationship, according to the regression results. The relationship between the variables has been found to be statistically significant. With a coefficient value of 6.359, STI is discovered as significant at the 99 percent confidence level, indicating that a rise in STI causes an increase in ROE and a decrease in STI causes a decrease in ROE. With an adjusted R-squared of 0.281, variation in independent variables (STI and LTI) explains to the tune of 28.1% of the variation in dependent variables (ROE).

The relationship between LTI and ROE is found to be statistically insignificant. The regression analysis revealed that LTI has an insignificant impact on ROE which means even if the LTI rises or falls, the ROE would remain unchanged. The reason for this is LTI profit reflection has yet to be arrived, since it takes time. Another cause is financial sector instability, which can cause investments to decrease in value. Some other reason is that FDs are not regarded excellent long-term investments because of rising inflation in the next year or more. With rising inflation money loses value. Since rising inflation will not result in a considerable rise in purchasing power, the return on FD will be low. A further cause involves low income generated on long term government bond in comparison to other investment alternatives such as corporate bond, real estate and so on. Long-term government bonds, have maturities ranging from 5 to 40 years. As a result, the bond's value may depreciate over time. The interest rate becomes less appealing as inflation rises. In addition, when the bond duration extends, the market risk, as well as interest rate risk, grows. Furthermore, the investor is stuck with an investment that pays less than its market worth.

4.2 Discussion

This study concentrated on drawing the conclusion of impact of short-term and long-term investment and profitability of life insurance company in Nepal with the help of secondary data analysis. Short-term and long-term investment position and profitability position has been analysed according to the purpose of the study. This study adopted correlation and regression model in order to know the relationship between short-term and long-term investment and profitability of life insurance companies in Nepal.

No previous studies analysing the impact of short term and long term investments on profitability of life insurance companies in Nepal were found during the present study. Therefore, the findings from the present study could be compared and discussed only with a few studies that were in research proximity with this present research.

As observed, fluctuation in profitability is seen in last 10 years for all companies under study. The profitability had increased in few years and decreased in few years but it did not mark a continuous increase or decrease for consecutive fiscal years. Investment position is not seen same for all companies under study, in some companies it is seen increasing and fluctuating in others. This study further concluded poor investment decision and insufficient return from investment are major factors for decreasing profitability. Relationship between short term investment and ROE is seen positive and significant whereas positive and insignificant between long-term investment and ROE.

The result of the study is consistent with Thapa (2002) that insurance industry has not consisted in the investment proportion of various investment sector and investment portfolio too. The result of the study also confirms Adhikari (2000), Gautam (2009), Dhakal (2015) and Shahi (2018) that insurance companies are investing their fund in very few sectors like fixed deposit, government saving fund and risk free sectors. The result is consistent with Nyanduko (2013) and Njiiri (2015) that investments in real estate, certificates of deposit, Government securities, corporate bonds and stocks have a significant impact on the profitability of the insurance companies. The result of the study matches with the finding of Hamal (2020) that overinvestment in long-term investments should be critically considered as it can have an adverse effect on future profitability of life insurance companies. The result of the study is consistent with Hailu (2018) that government securities and fixed asset investment have positive and significant impact on performance of insurance companies. The insurance companies had given more priority to invest in fixed deposits. The bank deposit amount covers more than 70 percentage of total investment, then in government securities, preference share and debenture and other sector respectively. The insurance company invested in most secure sector which matches with the findings of Ghimire (2021).

Previous studies primarily focused on investment on government securities, fixed deposits, bonds, debentures, shares, and so on; however, this study focuses on short and long term investments, which include all types of investments made by life insurance companies.

CHAPTER V

SUMMARY, CONCLUSION AND IMPLICATIONS

5.1 Summary

Insurance benefits society by influencing the allocation of production components, engaging in loss prevention programs, recognizing losses, serving as a foundation for credit systems, removing worry, and creating a pathway for investible funds. Insurance was created to protect people's interests from unforeseen events by guaranteeing payment in the event of a disaster. This study aims to examine the relationship and impact between independent variables, i.e., Long Term Investment and Short Term Investment and dependent variable, i.e., Return on Equity of life insurance companies of Nepal. In addition, to examine the profitability and short-term and long-term investment position of insurance companies. Various books, journals articles and some previous research work related to this topic and many indirect topics were reviewed to carry out this study. In order to study the relationship among the variables various hypothesis were formulated and tested. This study used 10 years' period of time data from 2009 to 2019. Out of 19 life insurance companies, only four companies were selected for this study. It employs various quantitative statistical tools and techniques like descriptive, correlational and causal comparative research design to analyse the data and information. For this purpose, secondary data from audited annual report were collected and analysed in systematic way to derive the findings. In this study, the data are analysed using mean, standard deviation, coefficient of variation, correlation and regression. It uses regression analysis to identify the impact of independent variable i.e. Short term investment and Long term investment on profitability, i.e., ROE of selected insurance companies.

The life insurance companies established between the year 2000-2008 were taken as samples. The sample companies are Asian Life Insurance Companies, Life Insurance Corporation Nepal, Met-Life American Life Insurance Company and Surya Life Insurance Company. Furthermore, descriptive statistics were used in the study to determine the mean of selected insurance companies in order to determine which of these companies performed

better throughout the research period. The study also used correlation to determine the relationship between the dependent and independent variables. In addition, the study determines the profitability of sample companies during the study period in order to identify which selected company is the best value for money. To determine if the investment had an impact on the profitability measures as prescribed by the research objectives, the study used regression analysis.

5.2 Conclusion

With the aim to examine the existing position of profitability and short-term and long-term investment, assess the relationship between profitability and short-term and long-term investment, and evaluate the impact of the independent variables; Short term investment and long term investment on ROE of Nepalese insurance companies. The descriptive statistics and causal comparative research design have been applied and secondary data is used for the analysis to know the mean of selected companies to the existing position of the selected companies in the research period. In this study, out of 19 life insurance companies four companies was taken into consideration to meet the research objectives. In this study, data was evaluated using mean, standard deviation, correlation and regression analysis.

The overall result obtained from the study are discussed below:

Throughout the last ten years' data, it is observed that the profitability of all companies had fluctuated. From among 4 different insurance companies, Met-Life American Life Insurance Company yielded the highest average Return on Equity of 34.447 percent, while Asian Life Insurance Company Limited yielded the lowest average Return on Equity of 9.673 percent, Surya Life Insurance Company yielded 10.006 percent, and Life Insurance Corporation Nepal yielded 20.414 percent. The maximum ROE of 18.23% was achieved by Asian Life Insurance Company Limited in FY 2011/12, and the least ROE of -2.105 percent was achieved by Asian Life Insurance Company in FY 2017/18. The maximum ROE was 54.386 percent in FY 2017/18 and the lowest was -10.26 percent in FY 2010/11 for Life Insurance Corporation Nepal. The maximum ROE was 119.93 percent in FY 2012/13 and the least was 7.18 percent in FY 2009/10 for Met-Life American Life Insurance Company. Surya Life Insurance Company had the highest return on equity of 19.612 percent in FY 2018/19 and the least return on equity of 3.3 percent in FY

2009/10.This indicates that for all companies throughout a ten-year period, the percentage return on equity has shown a shifting tendency. The profitability has been in increasing and decreasing and has never been constant in past 10 years. The reason behind the decreasing profitability can be the poor reinvestment decision and insufficient income from the place of investment.

The short-term and long-term investment position in the selected insurance company is increasing in certain companies while fluctuating in others, according to the ten-year data. ALICL and LICN is determined to be in a fluctuating state among the four companies studied, while the SLICL and ALICO are increasing its short term investment. The highest average amount of short-term investment during a ten-year period was Rs. 7.87 billion for Met-Life American Life Insurance Company and lowest Rs. 1.09 billion for Surya Life Insurance Company. When it comes to long-term investment, ALICO is viewed as fluctuating, although other insurance companies are usually rising, excluding a few years. Life Insurance Corporation Nepal seemed to have the greatest average long-term investment of Rs. 12.87 billion and Surya Life Insurance Company seemed to have the lowest at Rs. 1.03 billion. The reasons for increasing in investment of insurance companies may be the public's growing awareness of insurance. People are becoming more aware of the advantages and benefits of investing in life insurance companies. Another factor might be the increased number of insurance company branches in various sections of the country. Changes in government policy and company policies have also contributed to an increase or decrease in insurance company investment. The reason for the decline in life insurance company investment might be the sales of insurance policy in decreasing trend and policyholder withdrawals. People's aptitude, interest, and capacity change with time and in response to their surroundings, which may drive them to abandon the policy. As a result, investment decreases. Another cause might be a reduction in the bank's interest rate. When interest rates change as a result of changes in bank policy, insurance companies' investment declines at the same time.

The relationship between STI and ROE is observed to be positive and significant. The 99 percent confidence level of positive significance indicates that when STI grows, ROE increases as well, and when STI falls, ROE decreases as well. Similarly, LTI has a positive relationship with ROE which means there is strong relationship between the variables.

Therefore, there is no statistically significant relation between return on equity and independent variables LTI which means increase or decrease in one variable do not significantly related to increase or decrease in other variables. The analysis also shows that the regression equation fits well, as the model fitted well into the data as the F-value is statistically significant. Therefore, STI and LTI, the independent variables, determine the variations in ROE, the dependent variable.

5.3 Implications

There are various factors that affect the profitability of insurance companies. This study focuses on some of the major factors that influence the profitability of life insurance companies. The result of this study has important implications and it is believed to be helpful for the insurance sector. Insurance sector should evaluate all the long-term and short-term plans that directly or indirectly affect the profitability. Out of the long-term investment and short-term investment, short-term investment affects the profitability significantly. There are various other factors like insurance size, liquidity, volume of capital, liabilities and fixed asset affect the profitability too. They should be examined by future studies.

The insurance companies should invest more in short term investments for maximising the profit. Insurance companies need to invest in high risk portfolio to gain higher return in short period of time. In order to diversify their portfolio, insurance companies should continue to invest in local stocks, international shares, cash equivalents, bonds, and investments in associates and subsidiaries, according to the report. According to the study, insurance companies should utilize passive techniques rather than aggressive strategies to increase their profitability. The general public's awareness regarding insurance has played a significant role in this favourable movement. People are becoming increasingly aware of the importance and benefits of insurance in their personal and professional lives in the current environment. These positive improvements in the insurance market have created the way for strong competition. To obtain a competitive advantage, insurance businesses should seek out innovative goods and services.

REFERENCES

Adhikari, N. (2000). *Insurance industry in Nepal: A study on investment policies and practices.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Alexander, G. J., Sharpe, W. F., & Bailey, J. V. (1998). *Fundamentals of investment.* New Delhi: Pearson Education.

Alqadi, I. (2017). The impact of investment portfolio attractiveness on-commercial banks profitability. *Zarqa Journal for Research and Studies in Humanities, 17*(3), 688-701.

Bhattarai, B. P. (2020). Factors influencing profitability of insurance companies in Nepal. *International Journal of Management, 11*(9), 8-14. doi: 10.34218/IJM.11.9.2020.002

Charumathi, B. (2012). On the determinants of profitability of Indian life insurers an emperical study. *Proceedings of the world congress on engineering, 1*(2), 4-6.

David, C., & Grace, E. (1994). Tax management and investment strategies of property-liability insurers. *Journal of Banking and Finance, 18*(1), 43-72. doi: 10.1016/0378-4266(94)00078-6

Dhakal, M. (2015). *A study on investment policies and practices.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Dhiab, L. B. (2021). Determinants of insurance firms' profitability: An empirical study of Saudi insurance market. *Journal of Asian Finance, Economics and Business, 8*(6), 235-243. doi:10.13106/jafeb.2021.vol8.no6.0235

Dowrie, G. W., & Fuller, R. D. (1950). *Principle of insurance*. New York: John Wiley and Sons Inc.

Gautam, P. (2009). *Premium collection and investment pattern of insurance comapanies.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Ghimire, R. (2021). Investment portfolio of insurance companies: An empirical study of Nepal. *A Biannual Referred International Journal of Business and Social Studies, 3*(2), 36-41.

Hailu, B. (2018). *The effect of investment on financial performance of insurance company in Ethiopia.* (An unpublished master degree thesis). Submitted to Faculty of Management, Addis Ababa University.

Hamal, J. B. (2020). Impact of firm specific factor on financial performance of life insurance companies in Nepal. *The Journal of Nepalese Business Studies, 13*(1), 23-35. doi: 10.3126/jnbs.v13i.34701

Hussain, A. (2016). Strategies for long term investment by non-life insurance companies in India. *Arabian Journal of Business and Management Review, 6*(6), 2223-5833. doi: 10.4172/2223-5833.1000280

Iregi, R. N. (2017). The relationship between investment strategies and profitability in the insurance industry of Kenya. *International Journal of Finance, 2*(5), 51-74. doi: 10.47941/ijf.140

Joo, B. A., & Hussain, A. (2019). Determinants of profitability of life insurers in India-panel evidence. *International Journal of Management Studies, 6*(1), 58-65. doi: 10.18843/ijmsv6iI

Joseph, O. (2013). The financial performance of life insurance companies in Ghana. *Journal of Banking and Finance, 14*(3), 286-302. doi: 10.1108/JRF-11-2012-0081

Khadka, P. (2013). *Comparative study on premium collection and investment pattern of insurance companies.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Kharel, K. R. (2021). Contribution of insurance business in Nepal. *The Economic Journal of Nepal, 42*(3), 54-65. doi: 10.3126/ejon.v42i3-4.36038

Loof, H. & Heshmati, A. (2008). Investment and performance of firms: correlation or causality? *Corporate Ownership & Control, 6*(2), 268-282.

Mahat, R. S. (1981). *Capital markets, financial flows and industrial finance in Nepal.* Kathmandu: Sajha Prakashan.

Marjanovic, I. & Popovic, Z. (2021). Profitability determinants of insurance companies in the republic of Serbia. *Economic and Financial Challenges for Balkan and Eastern European Countries, 10*(1), 133-159. doi: 10.1007/978-3-030-39927-6_9

Markowitz, H. (1952). The utility of wealth. *Journal of Political Economy, 60*(2), 151-158. doi: 10.1086/257177

Mawhary, A. H., & Blanchard, R. H. (1995). *Insurance*. New York: Mc. Graw Hill Book Company Inc.

Mehr, R. I. (1983). *Fundamentals of insurance*. Illinois: Irwin Professional Publishing.

Murad, A. (1964). *What Keynes Means.* USA: Bookman Associates.

Nyanduko, V. (2013). *The relationship between investment and financial performance of insurance companies in Kenya.* (An unpublished master degree thesis). Submitted to Faculty of Management, University of Nairobi.

Njiiri, V. (2015). *The relationship between investment and financial performance of insurance companies in Kenya.* (An unpublished master degree thesis). Submitted to Faculty of Management, University of Nairobi.

Panda, L. (2013). Investment management and LIC of India: An analytical study of the segment wise investment. *Journal of Business Management, Commerce and Research, 1*(3), 73-81.

Poudel, R. L. (2019). Impact of ownership structure on the profitability of Nepalese insurance. *Nepalese Journal of Business, 4*, 52-65. doi: 10.3126/paj.v4i0.37014

Securities Board of Nepal. (2007). Institutional investment in Nepalese securities market. *SEBON Journal, 3*(1), 80-94.

Sekaran, U. (2016). *Research methods for business*. United Kingdom: John Wiley and Sons Inc.

Shahi, R. (2018). *Premium collection and investment pattern of non-life insurance companies in Nepal.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Shim, J. K., & Siegal, J. G. (1989). *Encyclopedic dictionary of account and finance.* New Jersey: Prentice Hall.

Shrestha, H. P. (2001). *Business Organization and Office Management.* Kathmandu: Ratna Pustak Bhandar.

Shrestha, S. (2002). *A study on premium collection and investment position of National life and General insurance company limited.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Skipper, H. J. (2001). *Insurance in the General Agreement on Trade in Services.* Washington DC: American Enterprise Institute.

Solnik, B. (1974). Why not diversify internationally rather than domestically? *Financial analysts Journal, 30*(4), 48-54. doi: 10.2469/faj.v30.n4.48

Thapa, T. B. (2002). *A comparative study on premium collection and investment pattern.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Trygye, R. (2006). Risk return measurement in portfolio selection and performance appraisal models. *Journal of financial and quantitative analysis, 4*(4),86-93.

Vaidyanathan, R. (2000). Regulatory framework for investment of insurance and pension fund in India. *IIMB Management Review.16*(3), 60-75.

APPENDICES

Appendices-1

Descriptive Analysis of sampled companies

Variables	N	Mean	Standard Deviation	Coefficient of Variation	Maximum	Minimum
ROE	40	18.635	21.519	1.154	119.93	-10.26
LTI	40	21.255	1.599	0.075	24.358	18.492
STI	40	21.383	1.385	0.064	23.623	18.774

Appendices-2

Correlation Analysis

	ROE	LTI	STI
ROE	1		
Sig (2-Tailed)			
LTI	0.085	1	
Sig (2-Tailed)	(0.600)		
STI	0.387*	0.154	1
Sig (2-Tailed)	(0.010)		

Appendices-3

Regression Analysis

Variable	Coefficient	T Value	Significance
Constant	-74.899	-1.224	0.229
LTI	1.997	0.979	0.334
STI	6.359	2.703	0.010*
R-squared	0.298		
Adjusted R-squared	0.281		
F Value	3.817		0.030*

Appendices-4

Types of insurance

Insurance Company insures wide variety of uncertain aspects of our life and society that can be classified as life and general insurance. It deals only with physical and mental accident of individual whereas general insurance considers all insurance except life insurance. Life and general insurance are broad concept and are discussed below.

i. Life insurance

Life insurance is a type of insurance plan conducted by the insurers that is directly related with providing assurance against the common part of total human life. It is not the assurance of life as it is impossible. However, it assures and tries to meet the economic aspects of human life. It provides future benefits against unseen future accident and it helps to live comfortably during retirement and incapable stage of life. Nepal Insurance Act 1992 (section 2-1) defined life insurance as the contract of insurance, affected on human life on the basis of age to pay a fixed sum to the assured or his nominee, on the death or on the happening of any contingency, dependent on human life in consideration of payment of a fixed instalment premium by the insured person. Therefore, it is also known as social insurance too. Life insurance can be defined as a contract by which the insurer, for a certain sum of money or premium proportionate to the age, health and other circumstances of the person. Whose life is insured if such person shall die within the period limited in the policy, will paythe sum specified to the persons in whose favour such policy is guaranteed.

The life insurance companies have proved to be a highly efficient means for channelling capital funds into those areas of the national economy, and into those uses, in which market demands have been strongest. Insurance companies provided various polices in accordance to insured interest and desire. The policies in life insurance that are common in practice are listed below.

Whole insurance

Life insurance policy that covers the entire life is called whole insurance. This policy covers a policy holder against death during his whole life. This policy is a long term policy

that insures the individual throughout his life. Whole life insurance doesn't have any expiration date. When signing the contract, the insurance company and the policy holders agree to set a face value (amount of money benefit in case of death) and a premium. This type of life insurance helps in building the value that is paid out to beneficiary in case of death of policy holder. Moreover, the premium is fixed irrespective of your age.

Term insurance

Term insurance policy is the most common life insurance policy and it covers for a specified term. It protects a policyholder's life only until its expiration date and after that it expired as it is for certain period. This policy premium is less than whole life insurance premium costs. It is beneficial for a short period of time and helps in immediate need.

Endowment policy

An endowment policy is a life insurance contract designed to pay a lump sum after a specific term (on its maturity) or o death. Typical maturities are ten, fifteen or twenty years up to a certain age limit. Some policies also pay out in the case of critical illness. Policies are typically traditional with profits or unit linked (including those with unitized with profits funds). Endowment can be cashed in early (or surrendered) and the holder then receives the surrender value which is determined by the insurance company depending on how long the policy has been running and how much has been paid into it.

ii. Non-Life insurance

Non-life insurance is also called general insurance. General insurance is the insurance of property and liable risk of insured against most specified cost that is premium. It also includes property insurance, liability insurance and others forms of insurance. This part of insurance includes the insurance and risk transfer of the property and liability of insured where property insurance against loss arising from the ownership or use of property includes two general classifications. The first in indemnifies the insured in the event of loss growing out of damage too or destruction of his/her property. The second form pays damages for which the insured is legally liable the consequence of negligent acts that result in injuries to other person or damage to their property. The individuals and organizations have to suffer a huge loss from the destruction of their physical things. Thus, they can

ensure their properties against the varieties of risk. Such risk may be marine risk, fire risk, etc. It is taken as means of providing financial protection for building, machinery, equipment, furniture, and vehicle and merchandise items against the risk of earthquake, accident and theft.

There are different kinds of non-life insurance classified according to their nature, which are as follows:

Marine insurance

The marine insurance is the oldest form of insurance that originated from Greek and maritime(marine) loan. This insurance policy is focused on insuring the loss or damage involved during transportation of goods from the points of loading to unloading of the goods. It is very essential insurance for the shipping industry as it protects against loss or damage by peril of the sea and generally, through the hazards of transit. In fact, marine insurance provides all kind of assurance during a given period of voyage that include from natural disaster to other manmade disaster. The modern marine insurance policy provides the protection against inland transit loss arising on the way to seller and buyer.

Fire insurance

The insurance policy that covers loss and damages caused by fire is called fire insurance. It is a contract made to compensate a certain loss or damage during the policy period caused by fire. Fire insurance plays a vital role in compensating the losses as it can cause a huge destruction of valuable property. However, the policy of fire insurance can be modified according to need of insurer that may include wide range of danger close to fire like wind, storm, earthquake, terrorism, explosion, and landslide. Fire insurance contract can be customized by changing the premium as for the need of insurer.

Aviation insurance

Aviation insurance policy covers the loss and damage occurred in aircraft during flights, landing, and take-offs. In addition to that, it also covers the risk of passengers and aircraft hull. Aviation is a big industry at present. So, aviation insurance policy has an immense

importance for assuring any future damage and loss. It includes the hull insurance, aircraft liability insurance and medical payments too.

Motor insurance

Automobile insurance has immense impact in sharing the loss and controlling the damage caused from vehicles. This insurance policy helps by covering the losses and damages resulting due to accidents of vehicles. With the growing number of vehicles in the street, road accidents have been major threat compared to other means of transport. Automobile insurance policy generally covers property, liability, and medical expense according to the contract made between insurance company and insurer.

Engineering insurance

This insurance policy helps in covering losses and damages occurring in construction and engineering industries. It covers against damages caused in engineering equipment and plants during the construction stage. From the small machinery to big equipment, everything is insured under these policies that enable a sound completion of the consignment.

Contractors all risk insurance

This insurance provides indemnity to contractors for physical damage that may take place during the period of construction and also during certain period of maintenance. This policy can be extended to cover third party liabilities also, depending upon the agreement.

Money and transit insurance

This type of insurance policy is generally required for bank and financial institution that are involved in receiving and sending cash from one place to another. It provides the indemnity of the cash loss during transit period.

Personal accident insurable policies

The policy helps insurer by financially assuring against being handicapped or disability resulting from accident. This insurance policy is very important for any individual as it financially helps in times of need and incapability.

Cattle and agricultural insurance

This insurance provides insurance coverage for various agricultural activities like livestock, poultry, fish, paddy, vegetables, and fruits etc. Farming against the risks of fire, Acts of God (Earthquake, Flood, Landslide, and Storm), diseases, and insects etc. Agricultural insurance is commenced in Nepal during FY 2013/2014.The insurance board has assigned the districts and the mandatory areas of work to provide agricultural insurance in all districts for non-life insurance.

Micro insurance

Micro insurance is insurance specially-designed to protect low-income households from the risks they face in their daily lives. It is low value product with low premium amount. Insurance companies have increased access to micro insurance at local level by collaborating with micro finance institution at local level. Micro insurance covers health, property or agricultural products and other valuable items of low-income households. Micro insurance enables the poor and low-income earners to insure their assets and operations against any disaster, and also helps small businesses to safeguard their resources that enable them to mitigate risks.

Appendices-5

List of Life Insurance Companies in Nepal

No.	List of Companies	Symbol	Location	Est. Year
1	American Life Insurance Company Limited (Met-Life)	MALIC	Kathmandu	2001
2	Asian Life Insurance Company Limited	ALICL	Kathmandu	2008
3	Citizen Life Insurance Company Limited	CLICL	Kathmandu	2017
4	Gurans Life Insurance Company Limited	GLICL	Kathmandu	2007
5	I.M.E. Life Insurance Company Limited	IMELICL	Kathmandu	2008
6	Jyoti Life Insurance Company Limited	JLICL	Kathmandu	2017
7	Life Insurance Corporation (Nepal) Limited	LICN	Kathmandu	2000
8	Mahalaxmi Life Insurance Company Limited	MLICL	Kathmandu	2017
9	National Life Insurance Company Limited	NLICL	Kathmandu	1988
10	Nepal Life Insurance Company Limited	NLIC	Kathmandu	2001
11	Prabhu Life Insurance Company Limited	PLICL	Kathmandu	2017
12	Prime Life Insurance Company Limited	PLIC	Kathmandu	2007
13	Rastriya Beema Sansthan	RBS	Kathmandu	1967
14	Reliable Nepal Life Insurance Limited	RENLICL	Kathmandu	2017
15	Reliance Life Insurance Limited	RLI	Kathmandu	2017
16	Sanima Life Insurance Company Limited	SALICL	Kathmandu	2017
17	Sun Nepal Life Insurance Company Limited	SNLICL	Kathmandu	2018

18	Surya Life Insurance Company Limited	SLICL	Kathmandu	2008
19	Union Life Insurance Company Limited	ULICL	Kathmandu	2017

Appendices-6

Profile of selected insurance companies

i. Asian Life Insurance Company

Asian Life Insurance Company got operating license as per Insurance Act 2049 from Beema Samiti (Insurance Regulatory Authority of Nepal) on 27th February, 2008 and started functioning on 3rd April, 2008. The Authorized Capital of the Company is Rs. 5 billion. Out of which Rs. 2.01 billion is currently paid up (70% by the promoter and the remaining 30% by the general public). It has 140 branch network across the nation.

ii. Life Insurance Corporation Nepal

Life Insurance Corporation (Nepal) Limited was incorporated under the Companies Act, 2053, on 27 December 2000. It has got the life insurance license from Beema Samiti on 07 August, 2001 and started operations from 01 September, 2001. The paid up capital of the company is 2.21 billion. The life insurance company of India is an integral part of this company with an ownership of 55% in the company and the promoters, Vishal Group of Nepal holds 25% of shares and the Public of Nepal holds the share of 20%. It has 78 branch scattered in different place of Nepal.

iii. Surya Life Insurance Company Ltd.

Surya Life Insurance Company Ltd. has been established and registered under Company Act 2063 B.S and Insurance Act 2049 as a Public Limited Company and was issued a license to operate Life Insurance Business on 19 March 2008. The authorized capital of the company is Rs 300 crore. The Paid-up Capital of the company is NRs 62.5 crore (70% by the promoter and the remaining 30% by the general public). It has 101 branches scattered in different place of Nepal.

iv. Met- Life American Life Insurance Company

Met- Life American Life Insurance Company has commenced its life insurance services in Nepal from 5th December 2001 after the formal incorporation with insurance board. It

is the first foreign organization to receive a license to offer life and accident insurance in Nepal. It has 35 branches scattered in different place of Nepal.

IMPACT OF INVESTMENT ON PROFITABILITY OF LIFE INSURANCE COMPANIES IN NEPAL

A Proposal

Submitted By

SMITA SUBEDI

Roll No.: 06/074

Symbol No.: 7345/18

TU Registration No.: 07-2-271-23-2013

Submitted to

Office of Dean

Faculty of Management

Tribhuvan University

In Partial Fulfilment of the Requirement for the Degree of

Master of Business Studies (MBS)

People's Campus

August, 2021

1. INTRODUCTION

1.1 Background of the study

Insurance operates as a windbreaker on such a humid day. It is an agreement between the insurer and the insured in which the members agree to indemnify the insured for just a loss caused by a particular cause within such a particular time period in consideration for a financial compensation known as premium. Life insurance insures a family in the instance of an individual's untimely passing or provides an appropriate amount in later life when earning capacities are diminished. In this approach, life insurance is really a form of protection as well as an investment, as a predetermined sum is repaid to the insured at the moment of death at the end of a given period. This arrangement is considered to be of high level of good faith and insurable interest. Insurance, in this context, is a system for minimizing financial losses by transferring risk of loss from one institution to another. The government has also taken initiatives to encourage people to invest in life insurance. In other words, insurance is the best means for security to human life and property from various risks (Shrestha, 2001).

Insurance company charges a certain amount called premium in return of assuring the insured for indemnity if the stated risk caused economic losses within the policy period. Insurance company collected fund in the form of premium and invests in different sectors for maximum return. Once earned, the premium is regarded as the income of the insurance industry. The growth and development of an insurance industry is basedon the large number of groups of various individuals, corporate businesses and financial organization who are policy holders of the company obtained directly by the representatives or through agents. The large number of policyholders leads to the large amount of premium collection for the minimization of occurrence of various risk and uncertainties. Insurance companies are considered as an important part of an institutional investment of any country as they invest in corporate securities as well as other collective investment schemes and in turn, they produce sufficient income to meet their obligations in the form of promised insurance benefits (Securities Board of Nepal, 2007).

Insurance companies performed three distinct jobs: i) Risk pooling, diversifying and loss

compensation, ii) Risk management; and iii) Resource mobilization. Academicians are agreed on the positive role of insurance in both developed and developing economies. Insurance enhance the economy through promoting financial stability, mobilizing savings, facilitating trade and commerce, enabling risk management, encouraging loss mitigation, fostering efficient capital allocation, substituting the complement of government social security programs (Skipper, 2001).

1.2 Statement of the problem

Nepalese insurance companies are successful Nepalese businesses that have remained in the insurance business without incurring any losses since their inception. As a result, in addition to national insurance businesses, more foreign insurance companies have started exporting in our country to conduct insurance business. The majority of businesses make more profit every year. Even so, if we exclude the balance sheet and profit and loss account, it is not substantial and satisfactory in comparison to the volume of transactions. Year after year, transaction volumes increase significantly, but net profitability does not expand at the same rate. It's due to private waiting in the rain and market competitiveness that's cutthroat. Over time, the profitability of all insurance businesses has been observed to fluctuate. As a result, the purpose of this research is to address the following issues:

i. What is the position of existing profitability and short-term and long-term investment of selected life insurance companies in Nepal?

ii. Is there relationship between profitability and short-term and long-term investment of selected life insurance companies in Nepal?

iii. What is the impact of short-term and long-term investment on the profitability of selected life insurance companies in Nepal?

1.3 Objectives of the study

The primary goal of this research is examine the impact of investment on the profitability of Nepalese life insurance businesses. The specific objectives of the study are as follows:

i. To examine the existing profitability and short-term and long-term investment position of selected life insurance companies in Nepal,

ii. To assess the relationship between profitability and short-term and long-term investment of selected life insurance companies in Nepal, and
iii. To evaluate the impact of short-term and long-term investment on the profitability of selected life insurance companies in Nepal.

1.4 Hypothesis of study

The study was carried out based on certain hypothesis. With the help of hypothesis, the study is able to analyse the impact of investment on Return on Equity. Following are the hypothesis made in order to study impact of short-term and long-term investment on Return on Equity of insurance companies:

$H_0$1: There is no significant relationship between short-term investment and ROE.

$H_0$2: There is no significant relationship between long-term investment and ROE.

$H_0$3: There is no significant effect of short-term investment on ROE.

$H_0$4: There is no significant effect of long-term investment on ROE.

1.5 Rationale of the study

The study is required to develop the Nepalese life insurance industry's investment policy. Insurance companies must effectively utilize their funds. As a result, it would be more prudent to determine the state of Nepalese life insurance businesses. It’s also necessary to explain the value of life insurance to Nepalese people. The study focuses on the life insurance industry in Nepal and the likelihood of future expansion, as well as tracing the weak areas in order to offer funds, insurance policies, and investment opportunities. It is a study of premiums collected under various plans that identifies flaws and recommends ways to address them. The study is significant in and of itself since it is a study of the foundation of the life insurance system by the researcher.

Insurance is now widely accepted as kind of a business, but the notion of insurance is not new in Nepal. Private insurance businesses have begun competitive and aggressive competition in this business as a result of liberal economic policy breaking the monopoly system and bringing competitiveness to the insurance industry. Due to this form of

competition, management must become more productive, while premium rates have been cut. Lowering the rate has the potential to lower profit amount, but it can also motivate employees to work in insurance firms and provide information about the current state of the industry in Nepal. It also assists the researcher in doing fresh studies in the area of fund investment and a series of studies on other Nepalese life insurance businesses.

1.6 Limitations of the study

The study's goal is to discover the facts and tendencies in the Nepalese life insurance industry's investment policy. As a result, the area of life insurance firms operating in Nepal is limited. Each activity does have its own series of restrictions, and this subject has its own series of restrictions that must be respected. These restrictions are called as limitations of this study. The limitations of the study are:

i. The whole study will deal with some selected life insurance company's investment policy as there is 19 life insurance companies operating in Nepal but it covers only four life insurance companies.
ii. This study will concern at least ten-year period's data and conclusion drawn confines only to the limit duration.
iii. Time and resources constraints can be another factor that limited the scope of the study.

2. REVIEW OF LITERATURE

A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. Thus, a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to do. This partof study deals with review of prior researches and theories.

2.1 Review of previous studies

Adhikari (2000) concluded that the major portion of investment was incepted within the head government securities and bank fixed deposits falling into the classification compulsory, only a smaller portion of investment was invested in the sectors falling into the classification ' optional'.

Insurance Regulatory and Development Authority (Investment) (Amendment) Regulations (2001) life insurers should invest at least 50 percent fund in Government approved Securities including the 25 percent in government securities, at least 15% fund in infrastructure and social sector, rest of the 35 percent in others sector which to be governed by Exposure norms as specified in regulation 5. Out of 35 percent, not exceeding by the15 percent fund can invest in the other than not approved sector. The regulation strictly regulated the insurance fund (at least 85 percent) in approved sector.

Shrestha (2002) studied on premium collection and investment position of National Life and General Insurance Company Limited. The study concluded that Investment on different sectors were also fluctuating trend and major portion of life investment went to bank fixed deposit it contributed 88.23% in highest and 69.71% in lowest.

Thapa (2002) concluded that the life insurance companies were unable to diversify the field of investment in term of portfolio choice and proportionate distribution among portfolios.

Gautam (2009) studied the premium collection and investment pattern of Insurance Companies. The findings demonstrate that insurance companies invest their money in only a few industries. They have solely invested in risk-free industries such as fixed deposits and government savings funds. Some insurance businesses' net returns are lower than the interest earned on their deposits.

Charumati (2012) found that the profitability of life insurance companies is positively and significantly influenced by the size of the firm and its liquidity. The study also revealed that factors like leverage, premium growth, and capital investment had a negative impact on the life insurers of India.

Khadka (2013) studied a comparative study on premium collection and investment pattern. The result shows that premium collection rate of Nepalese insurance industry has been fluctuating trend. The insurance industry has not consisted in the investment proportion of various investment sector and investment portfolio too. The coefficient of correlation between premium and investment of Nepalese insurance industry has high degree of positive correlation with significant relationship.

Nyanduko (2013) studied the relation between investment & financial performance of insurance companies in Kenya. The research objective was to establish the relationship between investment and financial performance of insurance companies in Kenya. The results show that investments in real estate, certificates of deposit, Government securities, corporate bonds and stocks have a significant impact on the financial performance of the insurance companies since the variables have major effect on financial performance.

Joseph (2013) identified the determinants of profitability in the life insurance industry of Ghana. The study also examines the relationship among the three measures of insurer's profitability, which are investment income, underwriting profit and the overall (total) net profit. The findings indicate that whereas gross written premiums have a positive relationship with insurer's sales profitability, its relationship with investment income is a negative one. Also, the results showed that life insurers have been incurring large underwriting losses due to overtrading and price undercutting. The results further revealed a setting-off rather than a complementary relationship between underwriting profit and investment income towards the enhancement of the overall profitability of life insurers.

Dhakal (2015) studied on a study on investment policies and practices. This study is concerned to find what are the main policies used to invest the collecting premium of insurance industries. The finding showed that the head securities and bank fixed deposit sectors of both the life and non-life insurance industries made up the majority of investment. The compulsory sector's portfolio has a continuous rate of return. However, in average, the return from the securities was highest and the return from the policy loan was lowest. Net investment income of life insurer and the industry was around three fourth of the net premium collection and net investment income of the non-life insurer with the industry was around two fifth of the net premium collection.

Njiiri (2015) explored the influence of investments on the financial performance of insurance companies in Kenya and found that investments made by insurer has a positive and significant impact on finance performance. Further the results of the study state that investment in real estate had the greatest impact, followed by government securities and bank deposits. Njiiri reasoned that the contribution by equities and corporate bonds was relatively weak which was attributable to the smaller portions invested in these asset classes and there relatively lower returns.

Hailu (2018) studied the effect of investment on financial performance of life insurance companies in Ethiopia. The dependent variables used to measure insurance performance was return on asset and in order to achieve the objectives, the study used four independent variables i.e., equity investment, fixed asset investment, fixed time deposit and Government securities. Insurance size and liquidity ratio were also taken into consideration as a control variable. From the regression result, Government securities, fixed asset investment, insurance size and liquidity ratio had a positive and significant effect on performance of insurance companies. Fixed time deposit had positive but insignificant effect on performance of insurance companies. Equity investment had negative and insignificant effect on performance of insurance companies.

Shahi (2018) studied on premium collection and investment pattern of non-life insurance companies in Nepal. The results indicate that insurance companies invest their funds in only a few industries. They consider fixed deposits and savings funds as safe and risk-free investments. Some insurance businesses' net returns are lower than the interest earned on their deposits. Similarly, EPS of insurance companies are not satisfactory in response to other financial institution like bank and finance. Even some insurance companies have lower rate of income than interest received from fixed deposit.

Poudel (2019) studied the effect of ownership as well as various firm-specific factors that determine the profitability of insurance companies. The study disclosed a negative relation of tangibility and liquidity with return on asset. Whereas, factors like firm size, age and leverage had a positive relation. Similarly, the study depicted a negative relationship between liquidity and return on equity and a positive relationship between firm size, age, leverage and tangibility.

Joo and Hussain (2019) investigated the factors that impact on profitability of life insurance companies in India. The study revealed that growth, and tangibility are significant in determining the profitability, as measured by ROA. On the other hand, leverage, commission ratio, and size are insignificant in explaining the profitability as measured by ROA. Investigations on the factors that determine the profitability of insurance companies have received much attention worldwide. However, as depicted by the aforementioned literature, there is no consensus on the determinants of profitability. The influencing factors are subject to change with the uniqueness of financial institutions in different countries.

Bhattarai (2020) examined the effects of capital structure on profitability of insurance companies in Nepal The study has been return on assets as dependent variable whereas total debt ratio, equity to total assets, leverage, firm size, liquidity ratio and assets tangibility are independent variables. The result concluded that equity to total assets, leverage, and assets tangibility effects the profitability in Nepalese insurance companies' cases.

Hamal (2020) studied impact of firm specific factors on financial performance of life insurance companies in Nepal. The study concludes that the most influencing factors for the financial performance in Nepalese life insurance companies are firm size and long-term investment. Along the same line, overinvestment in long-term investments should be critically considered as it can have adverse effect on future profitability of life insurance companies. Life insurance companies should increase their size only after careful examination over financial performance as it can result in diseconomies of scale and reduce the firm’s profitability.

2.2 Research gap

There is long gap between the previous works and this study. This study studies four life insurance companies and ten years’ data, which are selected different from previous researchers. They did not focus on comparable tools likes ROE but this study use ROE. Previous studies focused on premium collection and investment patterns while this study based on investment policy of life insurance companies only. Previous studies used only financial tools and ignored statistical tools but this study used both financial and statistical tools. Previous studies were based on descriptive way only but this study used descriptive

and analytical basis. Therefore, there is a research gap, as no previous studies examined short-term and long-term investment and profitability measured in terms of ROE, and more so on in Nepalese insurance sector.

3. RESEARCH METHODOLOGY

This chapter has been divided into five sections. First section deals with the brief description of research design, while second section describes selection of population and sample of study. Section three explains the nature and sources of data employed. Fourth section deals with the method of analysis and finally fifth section deals research framework and definition of variables.

3.1 Research design

The research design adopted in this study consists of descriptive and causal comparative research designs to deal with the various issues raised in the study. This research design is selected for the study to know the short-term and long-term investment and profitability position of the selected companies and examine the relationship between the dependent variable and the independent variables.

3.2 Population and sampling procedure

The listed life insurance companies are the population for this study. In this study, four insurances company's secondary data are analysed for the purpose of concluding the result accordance to the objectives. For selecting the samples, the judgmental sampling method was adopted by considering the nature and types of insurance facilities. The present study has drawn the judgmental sample based on the two major criteria: one, the life insurance companies established between the year 2000 and 2008; and two, the life insurance companies established in the private sector, that is, state-owned life insurance companies were not covered. The sample life insurance companies are Met- Life American Life Insurance Company Limited (ALICO), Asian Life Insurance Company Limited (ALICL), Life Insurance Corporation Nepal Limited (LICN) and Surya Life Insurance Company Limited (SLICL).

3.3 Nature and sources of data

This study is based on the secondary source of data. Secondary sources of data consist of information that has been gathered and often interpreted by other researchers and recorded in books, articles, and other publication. In this study, required information has been collected from the official websites of selected insurance companies and Beema Samiti, the regulating authority of insurance businesses in Nepal. In this study, four insurances company's secondary data are analysed for the purpose of concluding the result accordance to the objectives.

3.4 Methods of analysis

In order to get the results from this research the various collected data from secondary sources have been coded and tabulated in required form. Tabulated data has been processed and analysed in descriptive way by using appropriate statistical tools and financial tools wherever necessary. In addition to the descriptive statistics, the present study has also used inferential statistical tools like correlation and regression to analyse the association between the investments and profitability of the selected private-sector life insurance companies of Nepal.

3.5 Research framework and definition of variables

A research framework has been used to help focus on the variables of the study. Short term investment and long term investment are the independent variable whereas Return on Equity is the dependent variable. The research framework of the study is in Figure 1.

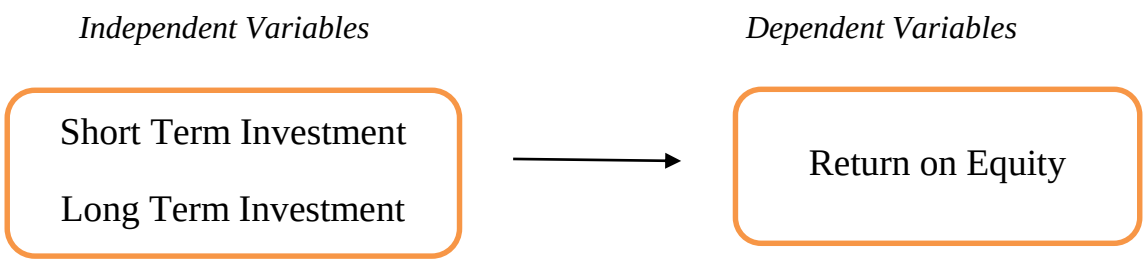

Figure 5. Research framework of the study

From the research framework and objectives of the study, it is clear that the study is aimed at determining the impact of variables namely short term and long term investment towards return on equity. The definitions of each variable used in the study are as follows:

3.5.1 Short term investment

A short-term investment, also called a temporary investment or marketable security, is a debt or equity security that is expected to be sold or converted into cash in the next 3 to 12 months. In other words, it's a stock or bond that management holds to earn a quick return and plans on selling in the current accounting period.

3.5.2 Long term investment

Long-term investments are non-current assets that are not used in operating activities to generate revenues. In other words, Long term investments are assets that are held for more than one year or accounting period and are used to create other income outside of the normal operations of the company.

3.5.3 Return on equity

This study employed ROE to measure the profitability of life insurance companies. Return on equity is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets. ROE is considered a measure of the profitability of a corporation in relation to stockholders' equity. Return on equity assesses how profitable the owner's money was managed. Since, Management reports directly to the owners, maximizing return on equity while maintaining acceptable risk levels is an essential and proper concern. Return on equity is the most popular statement of the ROI principle applied to company performance at the top level of management and outside the company. Hence, the study use ROE as dependent variable.

3.6 Organization of the study

This study has been divided into five chapters i.e., introduction, literature review, research methodology, analysis and discussion, and summary and conclusion. The first chapter

contains introduction part of the study. It includes background of the study, statement of the problems, objectives of the study, hypothesis of the study, rationale of the study, limitations of the study and organization of the study. The second chapter contains theoretical review and review of previous studies. The third chapter deals with research framework and definition of the variables, research design, population and sampling, sources of data, data analysis tools. The fourth chapter presents the analysis of the data and discussion in the form of various tables and figures and the fifth chapter contains summary, conclusion and implication of the study. Finally, an extensive references and appendices are presented at the end of the study.

REFERENCES

Adhikari, N. (2000). *Insurance industry in Nepal: A study on investment policies and practices.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Bhattarai, B. P. (2020). Factors influencing profitability of insurance companies in Nepal. *International Journal of Management, 11*(9), 8-14. doi: 10.34218/IJM.11.9.2020.002

Charumathi, B. (2012). On the determinants of profitability of Indian life insurers an emperical study. *Proceedings of the world congress on engineering, 1*(2), 4-6.

Dhakal, M. (2015). *A study on investment policies and practices.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Gautam, P. (2009). *Premium collection and investment pattern of insurance comapanies.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Hailu, B. (2018). *The effect of investment on financial performance of insurance company in Ethiopia.* (An unpublished master degree thesis). Submitted to Faculty of Management, Addis Ababa University.

Hamal, J. B. (2020). Impact of firm specific factor on financial performance of life insurance companies in Nepal. *The Journal of Nepalese Business Studies, 13*(1), 23-35. doi: 10.3126/jnbs.v13i.34701

Hussain, A. (2016). Strategies for long term investment by non-life insurance companies in India. *Arabian Journal of Business and Management Review, 6*(6), 2223-5833. doi: 10.4172/2223-5833.1000280

Joo, B. A., & Hussain, A. (2019). Determinants of profitability of life insurers in India-panel evidence. *International Journal of Management Studies, 6*(1), 58-65. doi: 10.18843/ijmsv6iI

Joseph, O. (2013). The financial performance of life insurance companies in Ghana. *Journal of Banking and Finance, 14*(3), 286-302. doi: 10.1108/JRF-11-2012-0081

Khadka, P. (2013). *Comparative study on premium collection and investment pattern of insurance companies.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Nyanduko, V. (2013). *The relationship between investment and financial performance of insurance companies in Kenya.* (An unpublished master degree thesis). Submitted to Faculty of Management, University of Nairobi.

Njiiri, V. (2015). *The relationship between investment and financial performance of insurance companies in Kenya.* (An unpublished master degree thesis). Submitted to Faculty of Management, University of Nairobi.

Poudel, R. L. (2019). Impact of ownership structure on the profitability of Nepalese insurance. *Nepalese Journal of Business, 4*, 52-65. doi: 10.3126/paj.v4i0.37014

Securities Board of Nepal. (2007). Institutional investment in Nepalese securities market. *SEBON Journal, 3*(1), 80-94.

Shahi, R. (2018). *Premium collection and investment pattern of non-life insurance companies in Nepal.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Shrestha, H. P. (2001). *Business Organization and Office Management.* Kathmandu: Ratna Pustak Bhandar.

Shrestha, S. (2002). *A study on premium collection and investment position of National life and General insurance company limited.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.

Skipper, H. J. (2001). *Insurance in the General Agreement on Trade in Services.* Washington DC: American Enterprise Institute.

Thapa, T. B. (2002). *A comparative study on premium collection and investment pattern.* (An unpublished master degree thesis). Submitted to Faculty of Management, Tribhuvan University.