DETERMINANTS OF PROFITABLITY OF NON-LIFE INSURANCE COMPANIES IN NEPAL

A Dissertation Submitted to the office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's

By

Laxmi Rai
Nepal Commerce Campus
Exam Roll No.: 11539/19
Registration No.: 7-2-0223-0178-2013

Minbhawan, Kathmandu
February 2023

CERTIFICATION OF AUTHORSHIP

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

Laxmi Rai

Signature:

Date of Submission:

RECOMMENDATION

This is to certify that the dissertation
Submitted by

Laxmi Rai

Entitled

"DETERMINANTS OF PROFITABILITY OF NON-LIFE INSURANCE COMPANIES IN NEPAL"

has been prepared as approved by this department in the prescribed format of the faculty of management. This dissertation is forward for examination.

……..	…….....	…….....
Tej Raj Pokharel	Assoc. Prof. Dr. Jitendra Pd. Upadhyay	Prof. Dhurba Prasad Silwal
(Dissertation Supervisor)	(Head of Research Department)	(Campus Chief)

Date:

REPORT OF RESEARCH COMMITTEE

Laxmi Rai has defended research proposal entitled "Determinants of Profitability of Non-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 Tej Raj Pokharel and submit the dissertation for evaluation and Viva-Voce examination.

Dissertation Proposal Defended Date:

…….

Tej Raj Pokharel

Position: Dissertation Supervisor

Signature: ……

Dissertation Submitted Date:

……

Assoc. Prof. Dr. Jitendra Pd. Upadhyay

Head of Research Committee

Signature: ……..

Dissertation Viva-Voce Date:

……

APPROVAL SHEET

We have examined the dissertation entitled "Determinants of Profitability of Non-Life Insurance Companies in Nepal" presented by Laxmi Rai for the degree of Master of Business Studies. We hereby certify that the acceptable for the award of degree.

.....
Tej Raj Pokharel
Dissertation Supervisor

.....
Internal Examiner

.....
External Examiner

.....
Assoc. Prof. Dr. Jitendra Pd. Upadhyay
Chair Person, Research Committee

Date:

ACKNOWLEDGEMENTS

I am delighted to present this dissertation entitled "Determinants of Profitability of Non-Life Insurance Companies in Nepal" to the head of the research department, Nepal Commerce Campus, in partial fulfillment of the requirement for the degree of Masters in Business Studies (MBS), Faculty of Management, Tribhuvan University. The completion of this dissertation would have been considerably difficult without the help, co-operation and suggestion of my supervisor Tej Raj Pokharel. I am indebted to him for his kind support in spite of his business. Moreover, I would also like to thank campus administration, staffs of library and faculties of Nepal Commerce Campus. Their cooperation and friendliness towards learner like me have always remained as a motivating factor.

Laxmi Rai

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURE

ABBREVIATIONS

ANOVA	:	Analysis of variance
CP	:	Claim Paid
DFL	:	Degree of financial leverage
EBIT	:	Earnings before interest and tax
EPS	:	Earnings per share
EVA	:	Economic value added
FS	:	Firms Size
GDP	:	Gross domestic product
N	:	Number of observations
NPESE	:	Nepal Stock Exchange
P/E Ratio	:	Price earnings ratio
PER	:	Price earnings ratio
ROA	:	Return on assets
ROE	:	Return on equity
ROI	:	Return on investment
Std.	:	Standard Deviation

ABSTRACTS

The study entitled “Determinants of Profitability of Non-Life Insurance Companies in Nepal”. In Nepal, at present there are 20-listed Non-Life Insurance Companies are operating their business. Among the listed Non-Life Insurance Company, four have been selected for research purpose. The ten-year data ranging from 2011/12 to 2020/21 have been incorporated. Namely, they are Himalyan General Insurance Company Limited, Sagarmatha Insurance Company Limited, Premier Insurance Company Limited and Siddhartha Insurance Limited. These four non-life insurance companies have been purposively selected in terms of rapidly expanding their branches. Thus, purposive sampling techniques have been employed.

As per the nature of research and research problem, the appropriate approach study will be used descriptive research design and casual comparative research design. This method is suitable when the researcher wants to describe present situation with the help of research done according to the past and present. The statistical tools consist of mean, standard deviation and coefficient of variation as well as the inferential statistic consists of mainly linear correlation and regression analysis for better evaluation of undertaken variables such as determinants of profitability (firm size, price earnings ratio, earnings per share, and claim paid), also known as independent variables (predictors). Likewise, profitability proxies such as return on equity and return on assets in form of dependent variables. In the light of the evidence, it is crystal clear as per the findings that the most prominent determinants for profitability in Nepalese non-life insurance companies is found to be earnings per share followed by firm size.

Keywords: Non-Life Insurance, Profitability, Return on Assets, Return on Equity, Firm Size, Price Earnings Ratio, Earnings per Share, and Claim Paid.

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The soundness of any organization has been exiting from the better performance of organization. Despites the good public relation, the organization performance is mandatory to sustainable development. The insurance sector is not far from this condition. The certain measures have been measurements of the profitability of organization. In this study, the return on assets and return on equity has been used to performance measures. The assessment of ROA and ROE for how much return of insurance companies on total assets and total shareholders' equity. The performance has been affected many determinants. The data were analyzed using ordinary least square (OLS) regression model. The dependent variable taken as profitability (ROE) whereas expenses ratio, leverage and size are independent variables. The regression result revealed that leverage and size have significant with profitability. Thus, this study concluded that the major determinants of insurance companies' profitability are financial leverage and size in the context of Nepal (Bhattarai, 2020).

Profitability is fundamental for any firm to retain a competitive advantage and facilitate long-term prosperity. It is widely used to measure the performance of financial institutions all over the world. It is one of the most important objectives of financial management since one of the main tasks and goals of financial management is to increase shareholders' wealth. A well-developed insurance sector is a boon for economic development as it provides long-term funds for infrastructure development at the same time strengthening the risk-taking ability of the country. Financial institutions encompass a broad range of business operations within the financial services sector including banks, trust companies, insurance companies, brokerage firms, and investment dealers. It plays a significant role in the socio-economic growth and development of a nation. The insurance sector plays important role in the financial services industry in almost all developed and developing countries, contributing to economic growth, efficient resource allocation, reduction of transaction costs, creation

of liquidity, facilitation of economics of scale in investment, and spread of financial losses (Sha & Magar, 2021).

The insurance market plays an important role in the financial services industry in almost all developed and developing countries, contributing to economic growth, allocating efficient resources, reducing transaction costs, creating liquidity, promoting investments and distribution of financial losses (Das, Davies & Podpiera, 2003).

Non-life insurance companies play a major role in the society as the operation of the industry can set energy for other industries and development of an economy (Abate, 2012). Financial liquidity refers to how easily assets can be converted into cash. Assets like stocks and bonds are very liquid since they can be converted to cash within days. However, large assets such as property, plant, and equipment are not as easily converted to cash. For example, your checking account is liquid, but if you owned land and needed to sell it, it may take weeks or months to liquidate it, making it less liquid (Muller, 2012).

Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage (Iswatia & Anshoria, 2007). There are two kinds of performance, financial performance and non-financial performance. Financial performance emphasizes on variables related directly to financial report. Company's performance is evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs. The third dimension is market premium, or the level of which company's market value is exceeding its book value (Walker, 2001).

This multidimensional view of performance implies that different models or patterns of relationship between corporate performance and its determinants has emerge to demonstrate the various sets of relationships between dependent and independent variables in the estimated models (Ostroff & Schmidt, 1993). Company performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the morale and ethic.

The function of insurance companies and other financial institution is to establish effective and efficient pecuniary structure by risk transfer, intermediation and savings mobilization in economy. Consequently, financial bodies canal resources and transport risks from one monetary element to another to assist resources pact and trade (Saeed & Khurram, 2015). One of the most severe liquidity stress scenarios faced by an insurer is a mass surrender of policies owing to a loss of confidence in its financial strength. This happened to Equitable Life following the House of Lords ruling on its guaranteed annuity liabilities in 2000. Risk is a natural element of business and community life (Kamau & Njeru, 2016). Insurance companies shares the function of banks and other financial institutions beside to the role of risk minimizing by pooling similar risk exposures (Daare, 2016). Liquidity Risk is a risk of insufficient liquid assets to meet payouts from policies (surrender, expenses, maturities, etc.), forcing the sale of assets at lower prices, leading to losses, despite company being solvent (Kamau & Njeru, 2016).

An effective working capital management is important for corporate managers and creditors as it determines how the firm manages risk to avoid bankruptcy. In recent times, insurance companies have realized the need to formulate proper working capital management policies to remain robust especially in the face of mounting demand for the payment of claims (Abid & Mseddi, 2004). Considering the strong increase in operating risk worldwide and the growing pressure on insurance institutions (Naveed et al.,2010), it seems prudent to pay attention to the financial health of these companies by focusing on good working capital management. To effectively manage liquidity and solvency, the management of corporate institutions would have to decide on the optimum level of both current assets and current liabilities that should be kept by management at a particular point in time. In the current study, the liquidity, capital structure, macroeconomic indicators and other firm specific characteristics of the insurance firms has been used as it is a comprehensive ratio which captures the relationship between the level of current assets and current liabilities (Zubairi, 2013). It is usually referred to as the current ratio, calculated as current assets/current liabilities.

In view of this Zubairi (2013) noted that “it makes such companies riskier because if the level of income is not sufficiently high, the fixed operating costs may not be

adequately covered, thereby resulting in an operating loss or a low operating profit. Thus, while a high degree of operating leverage has increase financial performance in times of rising sales or inflow of income; operating profits has reduced rapidly when sales are showing a declining trend". From this backdrop, an insurance company having high fixed cost as percentage of its total costs coupled with a high financial leverage has expose policyholders to the risk that they might not be able to indemnify when the unfortunate event occurs. It is therefore important to pragmatically forecast future premiums, if risk is to be contained. If premium receipts are not sufficiently high to adequately cover fixed costs, operating profit may be so low that fixed interest charges are not covered (Naveed et al., 2010).

Therefore, this study is concerned with determinants of profitability of non-life insurance companies in Nepal. The study is highly focused on the relationship of firm's size, earnings per share, price earnings ratio, operating expenses ratio, insurance premium, claim paid and profitability. Further, it inquires the effect of firm's size, earnings per share, price earnings ratio, operating expenses ratio, insurance premium and claim paid on profitability in terms of both return on assets and return on equity.

1.2 Problem Statement

The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large (Naser & Mokhtar, 2004).

In Nepal there was a good performance of many sectors such as banking sector, the insurance sector did not react to the growth of Nepal economy. The overall financial performance of insurance companies in Nepal is somehow weak expect for some companies which accomplished some revenues. This study tries to investigate the weakness in the overall financial performance of insurance companies. The study's main objective then could be summarized in identifying the factors affecting Nepalese insurance companies' financial performance.

Naveed, Zulfqar and Ahmad (2011) have shown that the efficiency of financial intermediaries and risk transfer, may affect economic growth, while at the same time the lack of their solvability lead to systemic crisis, which bring adverse consequences for the whole economy. In this way, we can say that today's business world would be unstable, without financial institutions like insurance companies. That because on one hand, it is a normal phenomenon that some business units are surplus and some are in deficit and on the other hand, businesses do not have the capacity to assume all risks with which they face in the uncertain environment in which they operate.

The study has dealt with the existing problem with the management of operating leveraging financial leverage and its impact on profitability. Unlike operating leverage, in the case of financial leverage, the fixed cost is the financial charges and its effect is on earnings before tax. Degree of financial leverage is higher in those companies which operate with large amount of debt capital since Abor (2008) established that, insurance companies are largely leveraged the expectation in this study is to attain a higher financial leverage for insurance companies in Ghana as well. This implies that the degree of financial leverage of insurance companies has reduced if the companies decide to operate with less amount of debt capital. This invariably means that not all equity firms have be leveraged. Empirical analysis indicates that firm level characteristics such as firm size, premium growth age of the firm, riskiness of the firm and macroeconomic variables such as Lending rate, exchange rate and GDP may possibly influence an insurance company’s financial performance, capital structure and degree of leverage (Abor, 2008; Amidu, 2007). However, these empirical relationships were not established without a theoretical basis. In view of that, the current study considers the pecking order theory, static trade off theory as well as the signaling theory to establish the conclusions of the study. The empirical findings of the study are based on panel data of insurance companies with its complete sets of accounts with the National Insurance Commission for the years 2002 to 2011. The core objectives of the study are two folds: First, to estimate whether firm specific variables as well as macro-economic variables exhibit a statistically significant association with financial performance of insurance institutions in Ghana. Second, to ascertain whether insurance companies have some distinct working capital management traits which are different from other industries and vary from the generally accepted theory?

According to Ahmadinia, Afrasiabishani, and Hesami (2012), the static trade-off theory projects how a firm's optimal debt ratio is determined by a swap between the benefits and obligations of borrowing, are holding the firm's assets and investment plans constant. The target debt equity ratio is estimated through a cost-benefit analysis of different levels of debt. The Pecking Order Theory on the other hand, explains the order in which a company's capital can be sourced and avoid dilution of control as well as increment in the cost of capital of the company. For that matter, companies would give first preference to the use of internal funds or retained earnings for meeting the financing requirements of their investment projects. They would next go for debt financing in case the internal sources are insufficient and as a last option, external financing through a new equity issue would be used. Thus, pecking order theory implies that financial oriented companies would not opt for debt financing for their new projects because of the availability of sizable amounts of internal funds.

However, as per static trade off, financially sound companies would give preference to the use of debt financing in view of the attraction of tax shield benefit available on borrowed funds. Thus, the static trade-off theory predicts that there would be a direct relationship between profitability and leverage, while the pecking order theory expects an inverse relationship between them. Moreover, the static trade off theory argument is that larger size companies have a higher preference for debt financing because of a lower probability of bankruptcy. In support of this is the assumption that large firms being more diversified, are less likely to go bankrupt (Amidu, 2007). From the empirical perspective of the working capital and the other variables used in the study, other researchers have found that there is an exchange of the goals of working capital management, profitability and liquidity of various industries such that strategies for the working capital management may significantly impact on both the liquidity of the company as well as the profitability of the company (Shin & Soenen, 1998).

Shin and Soenen (1998) further analyzed that typology should not be assessed exclusively in terms of liquidity. Finally, as profitability and liquidity are, in the long term, related to the solvency of the company, a more complete assessment of the typology should involve three dimensions profitability, liquidity and solvency. However, this study did not consider a wider spectrum of firm specific variables which the current study sought to establish. Mseddi and Abid (2004) employed the panel data methodology to compute the degree of operating leverage and the degree of financial

leverage for firm in USA for a period of five years and explored the association between the risky nature of the firms and the relative value. The study identified a positive effect on company value of both operating and financial leverage meaning that with the surge in the various degrees of leverage of the firms in USA the value of the company also increases which is obvious because of the benefit debt as a capital. The researchers also proved that, the excess return is a positive and increasing function of operating leverage, degree of financial leverage and systematic risk for sample firms that show a positive correlation of sales changes with market portfolio returns.

In a related study, Eljelly and Abuzar (2004) sampled Saudi Arabian companies who are in the major business sectors and studied the association of profitability with liquidity covering a period of five years again and found that there is a significant negative association between firm profitability and liquidity was established, while company size and profitability establishing a positive strong relationship. Liquidly and firm size which formed the controlling variables in the study were found to have a higher influence on the profitability of capital intensive industrial sector firms as compared to their effect on service sector organizations. Even though the service sector was considered in their work, there was the lack of the financial institutions as well.

Chen and Wong (2004) stated that high profits provide both the tools (bigger availability of funds), and the incentive for new investment (higher rate of return). Insurance companies have a dual responsibility, they must be profitable in order to be able to make new investments and they must be profitable in order to have the necessary solvability to convert other parts of the economy in previous state after the occurrence of damage.

Financial institutions encompass a broad range of business operations within the financial services sector including banks, trust companies, insurance companies, brokerage firms, and investment dealers. It plays a significant role in the socio-economic growth and development of a nation. The insurance sector plays important role in the financial services industry in almost all developed and developing countries, contributing to economic growth, efficient resource allocation, reduction of transaction costs, creation of liquidity, facilitation of economics of scale in investment, and spread of financial losses (Sha & Magar, 2021).

The dependent variable taken as profitability (ROE) whereas expenses ratio, leverage

and size are independent variables. The regression result revealed that leverage and size have significant with profitability. Thus, this study concluded that the major determinants of insurance companies' profitability are financial leverage and size in the context of Nepal (Bhattarai, 2020).

Therefore, this study seeks to answer the following questions:

i) Is there relationship between company size, earnings per share, claim paid, price earnings ratio and profitability (ROA and ROE) in listed non-life insurance company?

ii) Dose company size, earnings per share, claim paid and price earnings ratio have impact on profitability (ROA and ROE)?

1.3 Objectives of the Study

The main objectives of this study have been measuring the determining the profitability of listed non-life insurance companies in Nepal.

The specific objectives are as under:

i) To examine the relationship between company size, earnings per share, claim paid, price earnings ratio and profitability (ROA and ROE) in listed non-life insurance company.

ii) To assess the impact of company size, earnings per share, claim paid and price earnings ratio on profitability (ROA and ROE)?

1.4 Research Hypotheses

The hypotheses of the study have been as under undertaking the dependent and independent variable hitting the research framework.

H1: There is significant relationship between company size and return on assets.

H2: There is significant relationship between earnings per share and return on assets.

H3: There is significant relationship between price earnings ratio and return on assets.

H4: There is significant relationship between claim paid and return on assets.

H5: There is significant relationship between company size and return on equity.

H6: There is significant relationship between earnings per share and return on equity.

H7: There is significant relationship between price earnings ratio and return on

equity.

H8: There is significant relationship between claim paid and return on equity.

1.5 Rationale of the Study

Regarding consideration of variable in this study have tremendous impact on quantitative financial statement analysis as well as knowing the behavior of variables. Moreover, positive or negative impact of used variables can be measured and analyzed for liquidity position. Better financial performance can enhance work efficiency and quality of work life for balance not only that but also to have huge profitability and shareholder's wealth and organizational wealth maximization.

1.6 Limitations of the Study

This particular study has the following limitations as mentioned below:

i) This study had only focused on quantitative data that has been collected from the secondary sources thus the reliability depends upon the accuracy of data.

ii) The study had used only time series data from 2011/12 to 2020/21. The general conclusion derived from this study may not be applicable globally.

iii) The study had highly based on secondary data and information. Thus, the conclusion and implications of the study had constrained by the validity of that information obtained. More other sophisticated tools had not been used to test the impact of firm size, profitability and liquidity in insurance companies.

iv) As per the research design, descriptive and causal comparative research designs have only been considered for the data analysis purpose.

v) As per sampling method the convenience sampling technique has been employed having only four samples out of seven listed non-life insurance companies.

CHAPTER-II

LITERATURE REVIEW

The chapter discusses about the fundamental concept of life insurance, efficiency, and financial performance. It includes findings of the relevant studies on efficiency and financial performance of international insurance market along with contribution of non-life insurance companies to economic development.

2.1 Theoretical Review

The theoretical review consists of mainly theories related to insurance companies' profitability. The contextual theories have been discussed underneath.

Constant or fixed policy

The Company pays out a fixed amount of its profit after tax as dividend. Thus, the company maintains a fixed payout ratio of dividend. This type of policy allows the shareholders to clearly know the amount of dividend to expect from their investments in the company. However as noted by Watson and Head (2004), the policy could be traumatic to companies experiencing a volatile or fluctuating profit earning. This is because of the uncertainty of its profit. If there are viable capital projects, the policy can be chaotic.

Progressive policy

Payments of dividend are on a steady increase usually in line with inflation. This could result in increasing dividend in money terms. The firm uses the policy as a ratchet. Every effort is made to sustain the increase even though marginal. Seldom, the company may be constrained to cut down on dividend payout. This is to enable it sustain its operations. This though is not a frequent action as it sends a wrong signal to investors. Firms operating this policy have avoid paying dividends during the period rather than consistently cut down on the dividend (Kolb & Rodriguez, 1996).

Residual policy

Dividends are just what is left after the company determines the retained profits required for future investment. This policy gives preference to its positive NPV (Net Present Value) projects and paying out dividends if there are still left-over funds

available. Dividend becomes a circumstantial payment paid only when the investment policy is satisfied. There is a tendency therefore that this type of policy could give rise to a zero-dividend structure. Firms may need to modify this policy to ensure that investors of the different clienteles are not chased out by a strict application of the policy (Kolb & Rodriguez, 1996).

Zero dividend policy

Some firms may decide not to pay dividend. This is especially common in newly formed companies that require capital to execute their projects. All the profit is thus retained for expansion of the business. Investors who prefer capital gains to dividends because of taxation have naturally be lured by this kind of policy. This type of policy is quite easy to operate and avoids all the costs associated with payment of dividends (Watson & Head, 2004).

Alternative policies to paying cash

In order to give shareholders a choice between dividends or new shares, the firm might choose to buy back shares. This is share or stock repurchase. This has a significant advantage in terms of tax to the shareholder. While the dividend is fully taxed just as ordinary income, the stock repurchases or buyback is not taxed until the shares are sold and the shareholder makes a profit or capital gain (Ross et al., 2003). There is also the policy of stock dividends and splits. Shareholders are given additional shares in lieu of cash as dividend (Brealey et al., 1999).

Explanations for Paying Dividends

Dividend policy is possibly one of the most discussed and mindboggling subjects in corporate finance. Perhaps it is for that reason literature offers such an abundant amount of information and research on the matter. There are several theories as to why firms should pay dividends or not. These theories include the dividend irrelevancy theory, bird- in hand theory, signaling theory, agency theory, Clientele effect, tax preference and life cycle theory.

Dividend irrelevancy theory

The dividend irrelevancy theory proposed by Miller and Modigliani (1961), argued that in a perfect market; one with independence of investment and dividend policies of firms, perfect capital markets, no taxes, perfect information, no transaction or flotation

cost, markets are complete, and no agency costs or contracting cost associated with stock ownership, dividend payments has not affect firm value. The reason is that in the presence of perfect market conditions, investors can create their own dividends without cost. If investors want a dividend they can simply sell off some of their shares.

Bird in hand theory

Gordon (1959) presented the bird-in-hand or the uncertainty hypothesis. As the name indicates, the author argued that dividends minimize the uncertainty associated with differed dividend payments. Further explanation for the bird in hand theory has been given by Gordon (1963) and Walter (1963), in which they concluded that investors always prefer cash in hand rather than a future promise of capital gain due to minimizing risk or lowering risk. Due to this preference, investors pay higher prices for a company's shares with cash dividends compared to a company that holds their profits when other factors are fixed (Baker & Powell, 1999).

Agency cost theory

Agency theory is based upon the separation of ownership and management in corporations. Owners of the firm delegate managers to act on their behalf. Jensen and Meckling (1976) define agency relationship as „a contract under which one or more persons (the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent'.

Signaling theory

Signaling hypothesis originates from the information asymmetry between managers and shareholders. Information signaling theory in the context of dividend policy was first introduced by Ross (1977), who created a theoretical model for dividend signaling. Signaling theory assumes that mangers typically have more information about the value of the firm's assets than outside agents. Managers therefore use dividend changes to communicate to the shareholders about the financial situation of the company.

Clientele effect

Miller and Modigliani (1963) described the clientele effect by stating that each firm has its own body of stockholders, who find its dividend policy optimum. This statement is the basis of what is called the clientele effect. The idea is that investors have different financial needs and investment objectives. For example, assuming that investors have

a portfolio of investments, these investments are attuned to serve the investors' goal such as high growth, capital preservation, income generation, and other types of strategies.

2.2 Conceptual Review

Davies and Pain (2002) defined it as the amount payable to shareholders from profit or distributable reserves. Dividend policy is primarily concerned with the decisions regarding dividend payout and retention.

Lasher (2000) described it as the practice adopted by managers in making dividend payout decisions. It details the amount of cash to be distributed to the shareholders and what is to be retained by the firm for further investment. It is a decision that considers the amount of profits to be retained and that to be distributed to the shareholders of the firm (Watson and Head, 2004). The objective of a firm's dividend policy is to be consistent in the overall objective of maximizing shareholders wealth since it is the aim of every investor to get a return from their investment.

Meaning of Life Insurance

Human being is surrounded by numbers of perils which may cause of health loss, income loss, professional liabilities, and death. Non-life insurance is a great invention of human civilization which provides security against the risks. It is a mechanism of risk diversification and loss indemnification by pooling and spreading of risk among the large numbers of risk exposures. Life insurance provides financial security to dependents in case of premature death of breadwinners or termination of income of policyholders due to the dismemberment and permanent disability.

Non-life insurance contract is based on some underlying features, which is called principles of life insurance. These principles are: Elements of a valid contract, Insurable Interest, Utmost good faith, Assignment and Nomination, Premium, Return of Premium (Rejda, 2007). However, the principle of return of premium is not applicable for some kind of insurance contract if the specified event not happens.

Hamsell (1999) defined non-life insurance as a social device which provides financial compensation for the effects of misfortune. The payment is being made from the accumulated contributions of all parties participating in the scheme.

Feyen, Lester and Rocha (2011) highlighted importance of non-life insurance as it provides financial security and better investment opportunity. Further, non-life insurance offers quality of life to policyholders by removing anxiety, uncertainty, and fear. It controls the unnecessary expenditure and stabilizes the income even during the adverse circumstances.

Non-life insurance Product

Non-life insurance is a type of financial instrument and is an intangible product. It is a long-term contract between insured and insurer. The contract is an assurance and long-term commitment to each other. On the basis of risk coverage and cash value benefits, non-life insurance products can be divided basically in two categories: I) Product that protects against the risk but has no cash value which is known as term product, and ii) Product that protects against the risk and has cash value which is known as endowment product. Insurance companies offer various types of non-life insurance products under each category.

According to Cockerell (1964), non-life insurance product is a legal contract between insured and insurer where all terms and conditions, benefits and riders are included. The non-life insurance can be defined as "a contract where insurer promises to pay a designated beneficiary a sum of money (the "benefits") in exchange for a premium, upon the death of the insured person or after completion of specified period".

Importance of insurance in a perspective

Recent research (Naveed, Zulfqar, and Ahmad, 2011) shown that the efficiency of financial intermediaries and risk transfer, may affect economic growth, while at the same time the lack of their solvability lead to systemic crisis, which bring adverse consequences for the whole economy. In this way, we can say that today's business world would be unstable, without financial institutions like insurance companies. That because on one hand, it is a normal phenomenon that some business units are surplus and some are in deficit and on the other hand, businesses do not have the capacity to assume all risks with which they face in the uncertain environment in which they operate.

Renbao Chen (Chen and Wong, 2004) stated that high profits provide both the tools (bigger availability of funds), and the incentive for new investment (higher rate of

return). Insurance companies have a dual responsibility, they must be profitable in order to be able to make new investments and they must be profitable in order to have the necessary solvability to convert other parts of the economy in previous state after the occurrence of damage.

Some Factors affecting the profitability of insurance companies

The variation of profits between insurance companies over the years, within a country, leads to believe that internal factors or specific factors of a firm play a major role in determining profitability. Authors like Sylwester Kozak in Poland (2011), Jay Angoff Roger Brown in the United States (2007), Al-Shami in UAE (2013), Swiss Re in Egypt (2008), etc. have studied the factors that influence profitability of non-life insurance company. Other authors like Adams, Hardwick of Zou in the UK (2008), Sandra Liang in Canada (2007), Wright in United States (1992) etc. have studied the factors affecting the profitability of non-life insurance companies. Most of these researchers, as for non-life insurance companies, as well as for non-life insurance company, focus on internal factors, where most used factors are the company age, company size, liabilities ratio, the volume of capital, fixed assets and liquidity ratio.

The company sizes

The company size can be expressed by many variables such as number of employees, number of branches, or total assets. Most researchers of the field use total assets to express the size of the company (Omondi and Muturi, 2013). The size of the company is considered as an influential factor because it shows that larger companies are better positioned in the market, operate with economies of scale, and thus enjoy higher benefits (Flamini, McDonald, & Schumacher, 2015).

Liquidity

Liquidity for insurance companies shows the ability of insurers to pay current liabilities, which have the nature of operating expenses or payment of compensation in case of damage. For the insurer primary sources of liquidity are cash flow from net premiums, investment returns and liquidation of assets (Chen & Wong, 2004). Most studies in this field treat liquidity as a factor affecting profitability, representing it by the current ratio (current assets/current liabilities). Regarding the relationship between liquidity and profitability of insurance companies, the results of different studies have been different. Some studies have concluded that there is a statistically insignificant link between

liquidity and profitability for insurance companies (Naveed, Zulfqar & Ahmad, 2011) while other studies suggest that there are statistically significant negative links between liquidity and profitability of the insurer (Chen &Wong, 2004).

The growth rate of the company

The growth rate for companies is generally expressed through the change in percentage of total assets of the company from year to year. In particular, for insurance company's growth rate expresses the percentage change in the total amounts of signed premiums from insurance companies. Studies related to these field shows that there is a statistically significant positive correlation between the growth rate of the company and its profitability (Malik, 2011).

Leverage

A company is described as leveraged if it is financed partly through debt simply because of the tax shield element of debt. But debt carries a fixed cost, which means that if the company increases its debt the degree of financial leverage also increases. Based on previous literature, financial leverage of a company may be computed in different ways but for the purpose of the current studies used the ratio of earnings before taxes (EBT) to earnings before interest and taxes (EBIT) for calculating degree of financial leverage (DFL). This mode of computation has been adopted because it focuses directly on the impact of interest on income before taxes.

Profitability

Profitability is a relative measure of the financial efficiency of the business. For the purpose of the current study profitability is taken as the return on equity (ROE) which is measured as earnings before interest and taxes (EBIT) divided by total equity of the insurance companies and used it as a dependent variable in the panel regression analysis to investigate the relationship of the other variables in the study.

Dividend payout ratio

The dividend payout ratio is the percentage of earnings paid to shareholders in dividends. Dividend payout is the outcome of cash dividend divided by net income. The dividend payout ratio provides an indication of how much money a company is returning to shareholders, versus how much money it is keeping on hand to reinvest in growth, pay off debt or add to cash reserves.

Concept of Financial Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period. Analysts and investors use financial performance to compare similar firms across the same industry or to compare industries or sectors in aggregate.

There are many ways to measure financial performance, but all measures should be taken in aggregate. Line items, such as revenue from operations, operating income, or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt. Six Sigma methods focus on this aspect.

There are many stakeholders in a company, including trade creditors, bondholders, investors, employees, and management. Each group has its own interest in tracking the financial performance of a company. Analysts learn about financial performance from data published by the company in Form 10K, also known as the annual report. Public companies must publish the SEC required 10K form. The purpose of the report is to provide stakeholders with accurate and reliable financial statements that provide an overview of the company's financial performance.

The main functions of the financial performance management

Many researchers have identified three main functions of financial performance management: as a primary objective of a business organization, as a tool of financial management and as a means of motivation and control.

The financial objectives of a for profit business are closely related to the needs of the external suppliers of company’s capital - shareholders. The main interest of shareholders is the rate of return on their capital which includes dividends and capital gains on the market value of their shares for a period divided by the share value at the start of a period. As earnings determine what can be paid out as dividends in the long run, shareholders and their agents (such as investment analysts) are primarily concerned with financial measures like earnings, earnings per share (EPS), dividend yield, dividend cover and ROI. That is why the shareholders of the company seek to hold their

managers accountable for the performance of the assets entrusted to them. External financial reports are intended to meet these needs.

Also, financial performance management provides financial management with valuable information for planning, controlling, capital investment decisions, budgeting and ratio analysis.

The third major function of financial performance measurement lies in its internal use as a means of motivating and controlling the activities of managers so that they concentrate on increasing the overall value of the business or, at least, the value attributable to the shareholders. Between different scholars in the history of financial performance measurement, there have been continuing debates over the rival merits of return on investment and value-based measures as financial performance measures. Most researches are now agreed that value-based measures, under which a cost of capital charge is deducted from operating profit, is conceptually superior to ROI as it explicitly allows for risk. It is stated that positive economic value added (EVA) is the accounting equivalent of a positive net present value that increase shareholders' wealth.

The essence of the problem with financial performance measures is that although numerous shareholders own a public corporation, control over its operations is in the hands of professional managers, who typically hold relatively few shares and whose interests often diverge from those of the silent majority of shareholders. Moreover, there is an asymmetry of information among owners and managers which possess detailed information about the company. This cause the problem of management control which can be overcome by the right system of incentives. Ideally, managers' performance measures have to be developed in such a way that they have influence managers' internal decision-making process through management compensations in the best interest of the company and shareholders. Further, it is assumed that shareholders are interested in the long-term company performance and their value depends on the company's long-term performance. Thus, shareholders may send right signals to managers through performance measures and the latter has make their decision in the best interest of the company as a whole organization and in the best interest of the shareholders.

2.3 Empirical Reviews

The review of previous studies consists of mainly two parted i.e. review of journal and articles as well as review of previous thesis. The empirical reviews from 2011 to 2021 have been carried out in the section of study.

Hifza (2011) researched on the major predictors of financial profitability non-life insurance firms of Pakistan. The data is collected from 35 companies which are listed in SBP including life and general over the period from 2005 to 2009 as sampled. The regression model is used to finding out the results. In last, the study reveals that age of company and profitability has no relationship, but the study reveals that the size of the insurance company and profitability has an insignificant impact on profitability. The further result also reveals that the capital volume is positively related to the profitability of a firm. Thus, ratio of loss and leverage found negative but significant relationship with dependent variable.

Talat and Muhammad (2012) studied on determinants of performance of general Insurers of Pakistan to attempt the study the financial data is collected from the year-end reports of 30 general insurance companies in Pakistan over the period from 2004 to 2009. The performance of general insurers is evaluated and measured on the basis of return on assets and return on equity, whereas risk, size, investments, leverage, past year performance of company and age is to be considered as explanatory variables. The results suggest that size, investment, past year performance and age of company have positively related to the dependent variable, whereas leverage and risk have negatively related to the performance of non-life insurers.

Amal (2012) studied the determinant of performance of financial activities of Jordanian insurers industry. The objective of this study is to investigate the most effective factors of the financial performance of insurance sector. Leverage, Age of the company, Size of insurers, liquidity, the competence of management is considered as independent variable and 25 companies data of the period of 2002 to 2007 evaluates by using regression model. Finally, the result shows that Leverage, ratio of liquidity, Size of insurers, the competence of management index have a positive effect on the performance of financial activities.

Razak (2012) studied on the product diversity, leverage and the performance of general insurance sector of Malaysia by using data from 2006 to 2009 of non-life insurance companies in Malaysia. Insurer performance, leverage, product diversity, insurer size, period and market share has been used as variables. Finally, the result of this study shows that the leverage is negatively associated with insurer's performance. The study also indicates that leverage could be beneficial or detrimental to the financial performance of non-life insurance firms.

Hsu-Hua et al. (2012) conducted a research on insurance company's performance and study the analysis of reinsurance of property liability of Taiwan and the study also study the relationship between reinsurance and company performance, the research included the firm size, Leverage, UR risk, Line of Business, Growth premium. Liquidity ratio, Reinsurance, ROI, and Holdings are as variables. The data of 15-property liability insurance companies are collected and after covering the period from 1999 to 2009 to find out the results. Finally, the result of the study shows that insurance underwriting, ROA, a line of business concentration, ROI, liquidity ratio and dummy financial holding have a positive significant correlation with the dependent variable. Further, it is observed that the reinsurance, underwriting risks, firm size, financial leverages, liquidity and return on investment positively and significantly influence on insurance company's performance.

Mohammad (2012) investigated on Iranian insurers to find out the effect of intellectual capital. The core objective of this study is to consider the role of intellectual capital and relationship with financial performance, for conducting this study the 39-company's data were selected as the sample during the period 2005-2007.Regression model has been tested and correlated to investigate the relationship between IC and firm performance. Finally, the result shows that positive relationship between among human capital efficiency and profitability.

Charumathi (2012) studied on the determinants of financial profitability of Indian non-general insurance sector. The data collected from 23 India life insurers in which 1 is public and rest of are private companies also gather as the sample. The study period covered the 3 financial years from 2008 to 2011 Firm size, Liquidity, Leverage, Growth of Premium Underwriting Risk and Total Equity of Capital has been used as an independent variable and ROA as dependent. In last, the result shows that profitability

of financial activities of non-general insurance companies has significantly influenced by the liquidity and company's size. The growth of premium, leverage and capital equity negatively influence the dependent variable which is the financial performance of non-life insurance sector of India. The further study does not find out any evidence of the relationship between financial profitability and underwriting risk.

Yuvaraj and Abate (2013) studied on the firm's financial profitability of insurance companies of Ethiopia, to attempt the study the nine insurance listed companies have been selected as a sample from 2003 to 2011.To check the effect of insurer's age, Size of the insurer, Growth, VOC, Tangibility of assists, Liquidity, Leverage on ROA. By using regression model, the results show that the volume of capital, the size of insurer, ratio of liquidity growth and ratio of leverage are the most important factors which are affecting the profitability of insurance sector of Ethiopia respectively in order of their degree of influence. The results also show that there is not any relationship between non-predictor variable and age of company of the Ethiopian insurance firms. In last the results show that no relationship between tangibility of assets and profitability of insurance companies of Ethiopia.

John, Samuel and Richard (2013) studied the degree of Financial and Operating Leverage and profitability of Insurance companies of Ghana. The study used to sample data of 18 insurance companies out of the 42 in the insurance, the data covered the period from 2002 to 2011.This study used eleven main variables which are profitability, liquidity, the degree of operating leverage, Exchange rate, lending rate, the degree of financial leverage, revenue growth, GDP, ratio of short term debt, long and total debt ratio. The result of regression model shows that the degree of financial leverage of insurance company and liquidity are inversely and negatively related to profitability while operating leverage is positively and directly related to profitability.

Joseph, Frank, Lordina and Richard (2013) investigated the performance of non-life insurance financial activities of companies in Ghana. Ten non-life insurance companies" data are collected from the annual financial reports which are covered the period of 11 years from 2000 to 2010and selected as sample. Gross written premiums, Size of the company, Interest rate, Claims, Investment income, underwriting profit, management expenses, Total debts, Gross domestic product, Reinsurance, sales profitability and company's profitability used as variables. The regression model is

applied and the results show that Gross written premiums of insurance company have a significant and positive relationship with company's profit gather from sales and the relationship between insurance underwriting profitability and investment profitability towards the and improvement and enhancement of the overall profitability of non-general insurers.

Daniel and Tilahun (2013) studied on insurance sector's specific factors and variables that determine the performance of Ethiopian Insurance sectors. The sample includes nine insurance companies' data over the period 2005-2010. This study explores the impact of insurance major attributes which are total assets of a company, claims, underwriting contribution, tangibility, liquidity, leverage, and age on performance of Ethiopian insurance sector. The results reveal through conduct the regression analysis that company's size, leverage, and tangibility are significantly related to ROA, on the other end ratio of loss (claim) is negatively and significantly related to dependent variable, although company's size, claim ratio, leverage ratio and tangibility are major predictors of performance of Ethiopian insurance sector. However, on the other end growth in insurance underwriting contribution, liquidity and age of company have an insignificant relationship with the dependent variable.

Ana-Maria and Gheorghe (2014) studied the determinants of profitability of the Romanian Insurance industry. Depending on data, availability out of the 41 insurance companies that operated in the Romanian insurance industry in 2012, total 21 companies were selected as the sample and covering the period of 2008-2012. In last the final results is revealed by executing the particular panel regression model data tools and techniques, the major predictors of the financial performance of the Romanian insurance sector are the leverage of insurance, size of company, insurance underwriting risk, risk retention ratio, annually growth of gross written premiums, and margin of solvency.

Mirie and Cyrus (2014) investigated on determinants profitability of non-life insurance companies in Kenya, the study finds out the relationship between selected factors of insurance which are investment yield, retention ratio, premium growth, size of company, earning assets, investment yield, ratio of retention, ratio of loss and total expense of financial performance of general insurance companies. The study conducted multiple linear regression analysis with data for 22, 23 and 25 underwriters for 2010,

2011 and 2012 years respectively. The results revealed that the financial performance was significantly and positively related to investment yield and earning assets. In addition, it is further observed that the performance of financial activities was insignificantly and negatively related to the ratio of loss and ratio of overall expense. The growth of contribution, size, and ratio of retention is not significantly related to firm's performance. Results emphasize the need for non-life insurance companies to focus on the investment operations, underwriting results and efficiency to improve firm performance.

Arif et al. (2014) worked on the relationship between firm's performance and risk of Indian insurance sector. To check the relationship among each other and to study the major factors that determines the firm performance. Volume of capital, size, solvency, liquidity, Underwriting Risk and leverage are considering as variables. Eight insurance companies are used as the sample. By using multiple linear regressions, the model study reveals that the management risk, solvency risk, and underwriting risk have a negative relationship with financial performance while liquidity risk, size and volume of capital have a positive relationship with firm's financial performance of non-life insurance companies of India.

Ornella et al. (2014) investigated the non-life insurance economic performance of European markets with the help of data from 2004 to 2012; the purpose of the research paper is to provide empirical evidence of determinants of the economic performance of European insurance sector. In last empirical finding, suggest the important factors affect the performance. The three main areas insurance variables, financial and reinsurance activities greatly influence the financial performance of an insurance company, but the study reveals that reinsurance does not contribute negatively and positively to the performance.

Chen (2014) studied the effect of company's specific variables on the profitability of property liability insurance sector of Taiwan at macroeconomics level. The study investigates the relationship of company's specific determinants and macroeconomics on firm profitability. For that purpose, 15, sample companies' data is collected over the period 1999 to 2009. By using REM model, the results show Mirie and Cyrus (2014) investigate on determinants profitability of non-life insurance companies in Kenya, the study find out the relationship between selected factors of insurance which are

investment yield, retention ratio, premium growth, size of company, earning assets, investment yield, ratio of retention, ratio of loss and total expense of financial performance of general insurance companies. The study conducted multiple linear regression analysis with data for 22, 23 and 25 underwriters for 2010, 2011 and 2012 years respectively. The results revealed that the financial performance was significantly and positively related to investment yield and earning assets. In addition, it is further observed that the performance of financial activities was insignificantly and negatively related to the ratio of loss and ratio of overall expense. The growth of contribution, size, and ratio of retention is not significantly related to firm's performance. Results emphasize the need for non-life insurance companies to focus on the investment operations, underwriting results and efficiency to improve firm performance.

Rajiben (2016) studied the profitability of non-life insurance of companies of India, the core objective is to find out the key measure and analysis the profitability of five insurance companies from 2010 to 2015. The various statistical techniques were used in which the main tool was ANOVA. Net premium is considered as dependent variable and independent were profit before tax, benefits paid, investments and liabilities. The result shows that there is no significant impact of income and profit before tax. Although rest of have significant impact on net premium.

Berhe and Kaur (2017) revealed Insurance business now a day plays a significant role in the growth of the financial services which ultimately leads to the overall success of the economy. The purpose of this study was to identify the key factors that affect profitability of insurance companies in Ethiopia. Specifically, it investigates the internal or firm specific variables (size of insurance companies, capital adequacy, leverage ratio, liquidity ratio, and loss ratio) and external or macro variables (market share, growth rate of GDP and inflation rate). In order to achieve this objective, the fixed effect model was used instead of random effect model following the result of Hausman test. Panel data covering 10 years period from 2005-06 to 2014-15 were analyzed for seventeen (17) insurance companies. Results of the regression analysis revealed that size of insurance, capital adequacy, and liquidity ratio and growth rate of GDP were the major factors that significantly affect the profitability of insurance companies. On the other hand, leverage ratio, loss ratio, market share and inflation rate were found to have insignificant effect on insurance company's profitability. Finally, the study suggested

that managers of insurance companies as well as the policy makers in the country should take crucial measures by framing policies and strategies that aimed in improving the overall profitability of insurers.

Almajali (2018) aimed at investigating the factors that mostly affect financial performance of Jordanian Insurance Companies. The study population consisted of all insurance companies enlisted at Amman stock Exchange during the period (2010-2018) which count (25) insurance company. The data collected was analyzed by using a number of basic statistical techniques such as T-test and Multiple- regression. The results showed that the following variables (Leverage, liquidity, Size, Management competence index) have a positive statistical effect on the financial performance of Jordanian Insurance Companies. The researcher recommended that a high consideration of increasing the company assets has led to a good financial performance and there is a significant need to have highly qualified employees in the top managerial staff.

Maria and Ghiorghe (2019) used by actuaries in the process of decision-making on underwriting and investment activities of the insurance company. The financial performance of insurance companies is also relevant within the macroeconomic context since the insurance industry is one of the financial system' components, fostering economic growth and stability.

The financial performance of insurance companies can be analyzed at micro and macroeconomic level, being determined both by internal factors represented by specific characteristics of the company, and external factors regarding connected institutions and macroeconomic environment. This study attempts to analyze the determinants of the financial performance in the Romanian insurance market during the period 2008-2019. According to the final results achieved by applying specific panel data techniques, the determinants of the financial performance in the Romanian insurance market are the financial leverage in insurance, company size, growth of gross written premiums, underwriting risk, risk retention ratio and claim paid.

Hamal (2020) examined the impacts of liquidity ratio, leverage ratio, firm size, age of the firm and total debt on the profitability of non-life insurance companies in Nepal. The dependent variable in the study is the return on asset (ROA), which is used as a

measure of profitability. The study is based on secondary data of nine non-life insurance companies studied over a period of ten years, from 2066/67 to 2075/76. The data were collected from the financial statements published annually by the selected non-life insurance companies. Descriptive statistics, correlation analysis and regression models have been employed in order to test the impacts as well as the significance of the selected independent variables on ROA.

The study concludes that the profitability of Nepalese non-life insurance companies increases with the increase in liquidity but decreases with the increase in leverage. However, the study establishes the insignificant relationship of firm size, firm age and total debt with profitability for the sector. The study thus suggests that non-life insurance companies should focus on the proper management of capabilities to pay liabilities to enhance profitability and also try to maintain a smaller value of leverage ratio to handle the above-average losses.

Bhattarai (2020) examined the variables that influencing profitability of Nepalese insurance companies. The study base on 10 insurance companies' panel data for 2012/13 to 2017/18 over five-year period and leading to 50 observations. The study has been taken Return on Equity (ROE) as profitability measures and as dependent variables.

The study also has been employees Expenses Ratio (ER), Financial Leverage (FL) and Size of Company (Ln_TA) factors as independent variables. The data has been processing with the help of SPSS 25 Software. The results revealed that expenses ratio other independent variables have positive relationship found. The results of study concluded that the financial leverage and size have major determinants of the profitability in Nepalese insurance companies.

Sha and Magar (2021) showed that firm size has a positive impact on return on assets and return on equity. It indicates that larger firm size leads to increase in return on assets and return on equity. Likewise, premium growth has a positive impact on return on assets and return on equity. It indicates that higher the premium growth, higher would be the return on assets and return on equity.

Moreover, firm age has a positive impact on return on assets. It indicates that an increase in firm age leads to increase in return on assets and return on equity. Moreover, assets tangibility has a positive impact on return of assets and return on equity. It means

that higher the assets tangibility, the higher would be the return of assets and return on equity. Likewise, there is a negative impact of liquidity ratio on return on assets and return on equity. It means that an increase in liquidity ratio leads to decrease in return on assets and return on equity.

Isayas (2022), in today's economy, banks play significant and irreplaceable roles in the growth of financial services, which ultimately leads to the overall success of the economy of a country. The very objective of this study was to investigate the key firm specific and macroeconomic determinants of profitability of commercial banks in Ethiopia. The empirical analysis is carried out using the generalized method of moments (GMM) estimation of dynamic panel data from 14 banks covering 12 years of operation from 2008 to 2019. A quantitative approach and explanatory design were employed to realize the stated objectives. To achieve the study objective, secondary data were collected from annual audited financial statements of sampled banks for the stated period. The model results of the study revealed that firm size, liquidity ratio, asset tangibility, capital adequacy, leverage and real GDP growth rate have a positive and statistically significant effect on the profitability of banks, while firm age and the inflation rate have a negative but statistically insignificant effect on the profitability of banks in Ethiopia. Future studies are suggested to be conducted in this research area by incorporating variables that are other than variables used in this study and unlike this study, all other financial institutions need to be included.

Table 1

Summary of Articles Reviews

Author's Name	Major Findigns
Hifza (2011)	The ratio of leverage, slovenly margin and inflation found negative but significant relationship with dependent variable i.e. profitability.
Talatandand Muhammad (2012)	The leverage and earrings have negatively related to the performance of non-life insurers.
Amal (2012)	The result shows that leverage, ratio of liquidity, and insurance premium have a positive effect on the performance of financial activities.

Razak (2012)	Finally, the result of this study shows that the leverage is negatively associated with insurer's performance. The study also indicates that leverage could be beneficial or detrimental to the financial performance of non-life insurance firms.
Hsu-Hua et al. (2012)	The result of the study shows that insurance underwriting, ROA, a line of business concentration, ROI, liquidity ratio and dummy financial holding have a positive significant correlation with the dependent variable.
Mohammad (2012)	The result shows that positive relationship between among human capital efficiency and profitability.
Charumathi (2012)	The result shows that profitability of financial activities of non-general insurance companies has significantly influenced by the liquidity, size and leverage and capital equity negatively influences the dependent variable which is the financial performance of non-life insurance sector of India. The further study does not find out any evidence of the relationship between financial profitability and underwriting risk.
Yuvaraj and Abate (2013)	The results show that the ratio of liquidity and ratio of leverage are the most important factors which are affecting the profitability of insurance sector of Ethiopia respectively in order of their degree of influence.
John, Samuel and Richard (2013)	The result shows that financial leverage, operating expenses and firm size have a significant negative effect on the profitability of the insurance companies. Operating leverage has a positive and statically significant influence on profitability and

	increase in the liquidity of insurance companies leads to an increase in firm profitability.
Daniel and Tilahun (2013)	The results reveal through conduct the regression analysis that company's leverages significantly related to ROA, on the other end ratio of loss (claim) is negatively and significantly related to dependent variable, although company's size, claim ratio, leverage ratio and tangibility are major predictors of performance of Ethiopian insurance.
Ana-Maria and Gheorghe (2014)	Leverage, growth and insurance premium of the insurance company positively impact to the performance of the insurance company.
Mirieand and Cyrus (2014)	The results revealed that the financial performance was significantly and positively related to investment yield and earning assets. And it is further observed that the performance of financial activities was insignificantly and negatively related to the ratio of loss and ratio of overall expense. The ratio of retention is not significantly related to firm's performance. Final results emphasize the need for non-life insurance companies to focus on the investment operations, underwriting results and efficiency to improve firm performance
Arif et al. (2014)	The model study reveals that the solvency risk have a negative relationship with financial performance while liquidity risk have a positive relationship with firm's financial performance of non-life insurance companies of India.
Ornella et al. (2014)	In last empirical finding suggest the important factors affect the performance. But the study reveals that reinsurance does not contribute negatively and positively to the performance.

Chen (2014)	The results revealed that the financial performance was significantly and positively related to investment yield and earning assets. In addition, it is further observed that the performance of financial activities was insignificantly and negatively related to the ratio of loss and ratio of overall expense. The growth of contribution, size, and ratio of retention is not significantly related to firm's performance. Results emphasize the need for non-life insurance companies to focus on the investment operations, underwriting results and efficiency to improve firm performance.
Rajiben (2016)	The result shows that there is no significant impact of income and profit before tax. Although rest of have significant impact on net premium.
Berheand Kaur (2017)	The Results of the regression analysis revealed liquidity ratio is the major factors that significantly affect the profitability of insurance companies. The leverage ratio, loss ratio, market share and inflation rate were found to have insignificant effect on insurance company's profitability.
Almajali (2018)	A high consideration of increasing the company assets has led to a good financial performance and there is a significant need to have highly qualified employees in the top managerial staff.
Maria and Ghiorghe (2019)	Results achieved by applying specific panel data techniques, the determinants of the financial performance in the Romanian insurance market are the financial leverage in insurance, company size, growth of gross written premiums, underwriting risk, risk retention ratio and claim paid.
Hamal (2020)	The study concludes that the profitability of

	Nepalese non-life insurance companies increases with the increase in liquidity but decreases with the increase in leverage. However, the study establishes the insignificant relationship of firm size, firm age and total debt with profitability for the sector
Bhattarai (2020)	The results of study concluded that the financial leverage and size have major determinants of the profitability in Nepalese insurance companies.
Sha and Magar (2021)	Showed that firm size has a positive impact on return on assets and return on equity. It indicates that larger firm size leads to increase in return on assets and return on equity. Likewise, premium growth has a positive impact on return on assets and return on equity. It indicates that higher the premium growth, higher would be the return on assets and return on equity.
Isayas (2022)	Firm size, liquidity ratio, asset tangibility, capital adequacy, leverage and real GDP growth rate have a positive and statistically significant effect on the profitability of banks, while firm age and the inflation rate have a negative but statistically insignificant effect on the profitability of banks in Ethiopia.

2.4 Research Gap

Research gap is a research question or problem which has not been answered appropriately or at all in a given field of study. This stage is very crucial to proceed with writing literature review since research questions can be framed only when the gap is identified. The gap itself becomes the purpose of your research in the later stages. As per the tools for data analysis, here in this study the statistical and financial tools have been taken into consideration for the meaningful evaluation of findings analysis. The hypothesis testing in this study does not satisfy with the John, Samuel and Richard

(2013) since the study has tested the hypothesis through p-value considering t-value only however in this study the f-value as well has been taken into consideration.

Joseph, Frank, Lordina and Richard (2013) investigate the performance of non-life insurance financial activities of companies in Ghana. Ten non-life insurance companies' data are collected from the annual financial reports which are covered the period of 11 years from 2000 to 2010 and selected as sample. Gross written premiums, Size of the company, Interest rate, Claims, Investment income, underwriting profit, management expenses, Total debts, Gross domestic product, Reinsurance, sales profitability and company's profitability used as variables. However, in this particular study, six-year annual data from 2011/12 to 2020/21 has been considered with ten numbers of data observations. As per variable undertaking degree of financial leverage, liquidity, size of the company, growth of the company, dividend payout ratio and profitability i.e. return on equity (ROE). Regarding this topic, in context of Nepal, the articles are rarely found. Thus, the major findings and conclusion have been compared with international article in terms of writing the research gap to some extent.

CHAPTER-III
RESEARCH METHODOLOGY

This chapter discusses the sample size, population and research design used for the study. The sources of data for this study came from a number of secondary sources, mostly the data base of the NEPSE listed non-life insurance companies and the insurance sector with extensive use of the annuals reports and financial statements of the insurance companies While the total population of listed non-life insurance companies in NEPSE is twenty.

3.1 Research Design

As per the nature of research and research problem, the appropriate approach study has been descriptive research design and casual comparative research design. This method is suitable when the researcher wants to describe present situation with the help of research done according to the past and present. The descriptive research design helps to gather adequate information regarding variables undertaken whereas causal comparative research design helps to identify the cause and effect relationship between and among variables.

3.2 Population and Sample

In Nepal, at present there are 20-listed Non-life insurance Companies are operating their business (Insurance Authority of Nepal, 2022). Among the listed Non-life insurance Company, four have been selected for research purpose. Namely, they are Himalyan General Insurance Company Limited, Sagarmatha Insurance Company Limited, Premier Insurance Company Limited and Siddhartha Insurance Limited. These four non-life insurance companies have been purposively selected in terms of rapidly expanding their branches. The four non-life insurance companies have been selected as sample since they have been listed rapidly expanding their branches and earning higher profitability.

3.3 Nature and Source of Data

The source of data for this study has been used here is, secondary, considering mainly the annual report of sampled insurance companies as well as the literature reviews and

references used before on similar nature of research. The data have been used for this study from 2011/12 to 2020/21 (10 years).

3.4 Instruments of Data Collection

In this study, only secondary data were used for the analysis of the report. The research study includes Secondary data which has been already published. The required data has been collected on several ways like annual report of selected non-life insurance companies, internet search in related link, books and journals, previous research studies and articles on the subject and reviews of other authors.

3.5 Methods of Analysis

With respect to data analysis tools and techniques, i.e. method of data analysis in this study descriptive statistic and inferential statistics has been used to measure the impact of variables that affect profitability of non-life insurance companies as per statistical tools. Similarly, the financial tool, ratio analysis has been incorporated.

I) Statistical Tools

A) Descriptive Statistic: Mean and standard deviation has been used to measure the relationship between variables. Where mean and standard deviation measures the average positive relationship and risk measurement between variables.

B) Inferential Statistics: Correlation and regression between variables has been measured to know positively correlated, negatively correlated or perfectly correlated or no correlation relationship.

Descriptive Statistical Tools

Descriptive statistical tools help to find out the trend of financial position of the sample insurance companies. It also analyzes the relationship between variables and helps to take appropriate decisions regarding the fulfillment of organization goals. Descriptive analytical tools such as percentage, mean (arithmetic), variance and standard deviation have been used in this research.

A) Average/ Mean

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if X_1, X_2.....X_n are the given N observations, then their arithmetic mean, denoted by $\overline{X}$ is given by,

$$\overline{X} = \frac{x_1 + x_2 + ... + x_n}{N} = \frac{\sum x}{N}$$

Where, $\sum X$ = Sum of the observations, and N = Number of Years

B) Standard Deviation

Standard deviation is the square root of the sum of the squares of the deviations measured from the mean. Thus, in the calculation of standard deviation, first, the arithmetic average is calculated and the deviation of various items from the arithmetic average are squared. The squared deviations are totaled and the sum is divided by the number of items. The square root of the resulting figure is the standard deviation of the series (Elhanceand Agarwal, 2000). The Greek letter sigma conventionally represents the standard deviation. If X1, X2… Xn is a set of N observations then, standard deviation is given by,

$$\sigma = \sqrt{\frac{\sum (X - \overline{X})^2}{N}}$$

$\sum (X - \overline{X})$ = Sum of the squares of the deviations measured from mean N = Number of Observations

C) Coefficient of Variation (C.V.)

Coefficient of variation is computed for comparing the variability of two distributions. A distribution with smaller C.V. is said to be more homogeneous or uniform or less variable than-the other, and the series with greater C.V. is said to be more heterogeneous or more variable than the other. It is computed as under.

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

Inferential Statistical Tools

Unlike with the data description which have the focus of describing the sample data, while the focus of inferential analysis is on estimation or hypothesis testing, by using sample purely to make inferences about the population. This process is formally known as inferential statistics. There are two major groups of inferential statistics, (I) parametric and (ii) non-parametric. In this research, parametric test such as Correlation Analysis and Regression analysis has been used.

A) Coefficient of Correlation (r)

The correlation is a statistical tool which studies the relationship between two variables and correlation analysis involves methods and techniques used for studying and measuring the extent of the relationship between the two variables. Correlation analysis enables to have an idea about the degree and direction of the relationship between the two variables under study. However, it fails to reflect upon the cause and effect relationship between the variables. The coefficient of correlation, denoted by r is computed as under:

$$r = \frac{N\sum XY - \sum X.\sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

B) Regression Analysis

Correlation analysis tells the direction of movement but it does not tell the relative movement in the variables under study. Regression analysis helps to know the relative movement in the variables. Regression analysis of the following variables have been calculated and interpreted in the present study.

The regression equation is;

ROA= α+ß1FS + ß2PER+ ß3EPS + ß4CP + μ

ROE= α+ß1FS + ß2PER+ ß3EPS + ß4CP + μ

Where,

ROA	= Return on Assets
ROE	= Return on Equity
α	= Constant
ß1, ß2, ß3 and ß4	= Coefficient of independent variables
FS	= Firm Size
PER	= Price earnings ratio
EPS	= Earnings per Share
CP	= Claim Paid
μ	= Error term

II) Financial Tools

A) Ratio Analysis: Ratio analysis is the comparison of line items in the business. Ratio analysis has been used to evaluate a number of issues with an entity, such as

its operations. This type of analysis is particularly useful to analysts outside of a business, since their primary source of information about an organization is its financial statements. Ratio analysis is less useful to corporate insiders, who have better access to more detailed operational information about the organization.

i) Return on Assets

For the purpose of the current study, profitability is taken as the return on assets (ROA) which is measured as earnings before interest and taxes (EBIT) divided by total assets of the insurance companies and used it as a dependent variable in the panel regression analysis to investigate the relationship of the other variables in the study.

$$\text{Return on Assets} = \frac{\text{Net profit after tax}}{\text{Total Assets}}$$

ii) Return on Equity

Return on equity (ROE) 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 how effectively management is using a company's assets to create profits.

$$\text{Return on Assets} = \frac{\text{Net profit after tax}}{\text{Total Shareholders}'\text{Equity}}$$

iii) Firm size

The company size can be expressed by many variables such as number of employees, number of branches, or total assets. Most researchers of the field use total assets to express the size of the company (Omondi & Muturi, 2013).

$$\text{Firm Size} = \text{Total net worth in log}$$

v) Price Earnings Ratio

The price-to-earnings ratio (P/E ratio) is the ratio for valuing a company that measures its current share price relative to its per-share earnings (EPS). The price-to-earnings

ratio is also sometimes known as the price multiple or the earnings multiple. Investors and analysts use P/E ratios to determine the relative value of a company's shares in an apples-to-apples comparison. It can also be used to compare a company against its own historical record or to compare aggregate markets against one another or over time.

$$\text{Price Earnings Ratio} = \frac{\text{Market Value per Share}}{\text{Earnings per Share}}$$

vi) Claim Paid

Claims Paid means the amounts paid for the covered employees of an employer by an insurer, health care center, hospital service corporation, medical service corporation or other entity as specified in subsection (b) of this section for medical services and supplies and for prescriptions filled but does not include expenses for stop-loss coverage, reinsurance, enrollee educational programs or other cost containment programs or features, administrative costs or profit.

$$\text{Claim paid} = \frac{\text{Loss Suffered X Insured Value}}{\text{Total Cost}}$$

vii) Earnings per Share

Earnings per share (EPS) is calculated as a company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability. It is common for a company to report EPS that is adjusted for extraordinary items and potential share dilution.

$$\text{Earnings per Share} = \frac{\text{Net Proft After Tax}}{\text{Total No. of Outstanding Share}}$$

3.6 Conceptual Framework

The study has been followed up below mentioned framework.

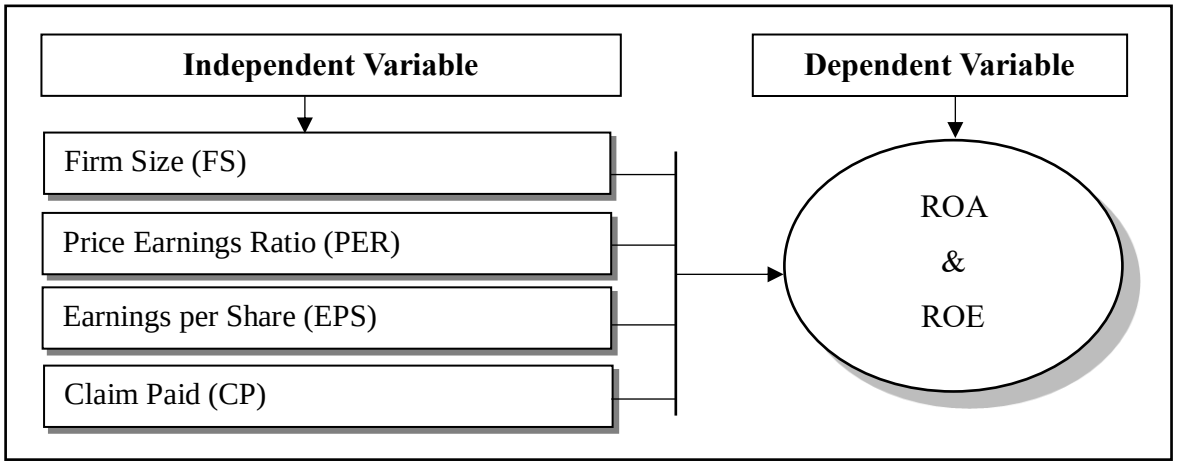

Figure 1: Conceptual Framework

3.7 Definitions of Variables

The definition of variables consists of the definition of both independent and dependent variables undertaken for the study. The independent variables include firm size, price earnings ratio, earnings per share, and claim paid whereas the dependent variables consist of return on assets and return on equity.

A) Dependent Variables

The dependent variables consist of return on assets and return on equity which represents the profitability of non-life insurance companies.

Return on Assets

Profitability is a relative measure of the financial efficiency of the business. For the purpose of the current study, profitability is taken as the return on assets (ROA) which is measured as earnings before interest and taxes (EBIT) divided by total assets of the insurance companies and used it as a dependent variable in the panel regression analysis to investigate the relationship of the other variables in the study.

Return on Equity (ROE)

Return on equity (ROE) 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 how effectively management is using a company’s assets to

create profits.

B) Independent Variables

The independent variables include firm size, price earnings ratio, earnings per share, and claim paid which represents the factors that could affect the profitability of non-life insurance companies.

Firm size

The company size can be expressed by many variables such as number of employees, number of branches, or total assets. Most researchers of the field use total assets to express the size of the company (Omondi & Muturi, 2013).

Price Earnings Ratio

The price-to-earnings ratio (P/E ratio) is the ratio for valuing a company that measures its current share price relative to its per-share earnings (EPS). The price-to-earnings ratio is also sometimes known as the price multiple or the earnings multiple. Investors and analysts use P/E ratios to determine the relative value of a company's shares in an apples-to-apples comparison. It can also be used to compare a company against its own historical record or to compare aggregate markets against one another or over time.

Earnings per Share

Earnings per share (EPS) is calculated as a company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability. It is common for a company to report EPS that is adjusted for extraordinary items and potential share dilution.

Claim Paid

Claims Paid means the amounts paid for the covered employees of an employer by an insurer, health care center, hospital service corporation, medical service corporation or other entity as specified in subsection (b) of this section for medical services and supplies and for prescriptions filled but does not include expenses for stop-loss coverage, reinsurance, enrollee educational programs or other cost containment programs or features, administrative costs or profit.

CHAPTER-IV

RESULTS AND DISCUSSION

The general purpose of this chapter is to analyze and interpret the data collected during the study. In this section of the study, various statistical tools described in chapter three have been used for fulfillment of study' objectives. It provides systematic presentation, interpretation, and analysis of secondary data in order to deal with various issues associated with claim paid effect on profitability of non-life insurance companies. To achieve the results both statistical and financial tools have been employed in this section as per requirements. The statistical tools consist of descriptive and inferential tools whereas financial tools consist of ratio analysis.

4.1 Descriptive Analysis

Descriptive statistical tools help to find out the trend of financial position of the sample non-life insurance companies. It also analyzes the relationship between variables and helps non-life insurance companies to take appropriate decisions regarding the fulfillment of organization goals. Descriptive analytical tools such as percentage, mean (arithmetic), variance and standard deviation has been used in this research. The undertaken dependent variables are return on equity and return on assets whereas earnings per share, price earnings ratio, claim paid and firm size as independent variables.

Table 2

Descriptive Analysis

Variables	N	Range	Min.	Max.	Mean	SD
FS	40	14469.39	366.31	14835.70	2234.87	2397.86
PER	40	75.59	-3.63	71.96	20.71	16.58
EPS	40	160.65	-54.26	106.39	38.32	24.84
CP	40	4299.09	79.17	4378.26	789.70	862.17
ROA	40	31.12	-7.14	23.98	8.45	5.86
ROE	40	155.77	-43.12	112.65	18.32	20.01

The descriptive analysis is based on total forty numbers of observations. The mean value for firm size in term of total assets is 2234.87 million with standard deviation

2397.86 million over ten years. The minimum and maximum value of firm size in term of total assets is 366.31 million and 14835.70 million. Thus, the range for firm size in term of total assets is 14469.39 million.

Moreover, the mean value for price earnings ratio is 20.71 percent with standard deviation 16.58 percent over ten years. The minimum and maximum value of price earnings ratio is -3.63 percent and 71.96 percent. Thus, the range for price earnings ratio is 75.59 percent.

Further, the mean value for earnings per share is Rs. 38.32 percent with standard deviation Rs. 24.84 over ten years. The minimum and maximum value of earnings per share is Rs. -54.26 and 106.39 respectively. Thus, the range for earnings per share is Rs. 160.65.

Likewise, the mean value for claim paid is 789.70 million with standard deviation 862.17 million over ten years. The minimum and maximum value of claim paid is 79.17 million and 4378.26 million. Thus, the range for claim paid is 4299.09 million.

Continuously, the mean value for return on assets is 8.45 percent with standard deviation 5.86 percent over ten years. The minimum and maximum value of return on assets is -7.14 percent and 23.98 percent. Thus, the range for return on assets is 31.12 percent.

Eventually, the mean value for return on equity is 18.32 percent with standard deviation 20.01 percent over ten years. The minimum and maximum value of return on equity is -43.12 percent and 112.65 percent. Thus, the range for return on equity is 155.77 percent.

4.2 Correlation Analysis

The Bivariate Pearson's' Correlation analysis has been incorporated to examine the relationship between undertaken dependent variables such as return on equity and return on assets and independent variables such as earnings per share, price earnings ratio, claim paid and firm size as independent variables. In this section, the correlation analysis has been conducted having return on asset and return on equity individually.

Table 3

Correlation Anlaysis with ROA

Variables	Ln_EPS	Ln_CP	Ln_FS	PER	ROA
Ln_EPS	1				
Ln_CP	-0.133	1			
	0.419				
Ln_FS	-0.053	.717**	1		
	0.750	0.000			
PER	-0.264	.581**	.451**	1	
	0.104	0.000	0.003		
ROA	.681**	-0.142	-0.226	-0.111	1
	0.000	0.382	0.162	0.496	

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

The table 3 depicts the correlation between dependent variable return on assets and independent variables such as earnings per share, claim paid, firms' size, and price earnings ratio. Similarly, earnings per share has positive relationship with return on assets with magnitude of .681. Further, the corresponding p-value of earnings per share is .000 which is less than .05. Thus, there is significant relationship between earnings per share and return on assets. Likewise, the claim paid, firm size, and price earnings ratio have negative correlation with return on assets with the magnitude of .142, .226, .111 and .079 respective. Further, the corresponding p-value of claim paid, firm size, and price earnings ratio is .382, .162, .496 and .629 which are greater than .05. Thus, claim paid, firm size and price earnings ratio have insignificant relationship with return on assets.

Table 4

Correlation Anlaysis with ROE

Variables	Ln_EPS	Ln_CP	Ln_FS	PER	ROE
Ln_EPS	1				
Ln_CP	-0.133	1			
	0.419				
Ln_FS	-0.053	.717**	1		
	0.750	0.000			
PER	-0.264	.581**	.451**	1	
	0.104	0.000	0.003		
ROE	0.222	0.009	0.140	0.042	1
	0.175	0.956	0.389	0.799	

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

The table 4 depicts the correlation between dependent variable return on equity and independent variables such as, earnings per share, claim paid, firms' size and price earnings ratio. It is revealed that claim paid, price earnings ratio have correlation with return on equity with the magnitude of .009, .042 and .018 respectively. Likewise, the earnings per share and firm size have positive correlation with return on equity with the magnitude of .148, .222 and .140 respectively. Further, the corresponding p-value of, earnings per share and firm size is .361, .175 and .389 respectively which are greater than .05. Thus, claim paid, firm size and price earnings ratio has insignificant relationship with return on assets.

4.3 Regression Analysis

The multiple linear regression analysis has been incorporated to examine the effect of independent variables such as earnings per share, price earnings ratio, claim paid and firm size on dependent variables such as return on assets and return on equity. The regression equation is as follow ROA= α+ß1FS + ß2PER+ ß3EPS + ß5CP + μ applied

in table 5 and ROE= α+ß1FS + ß2PER+ ß3EPS + ß4CP + μ applied in table 6.

Table 5

Regression Anlaysis of PER, EPS, CP and FS on ROA.

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
.767a	.588	.511	3.75	7.611	.000

Model		B	T	Sig.
1	(Constant)	18.592	1.059	.298
	PER	.001	.023	.982
	EPS	7.646	5.715	.000
	CP	1.328	1.305	.201
	FS	-2.753	-2.097	.044

a. Dependent Variable: ROA
b. Predictors: (Constant), FS, EPS, PER, CP

The table 5 depicts the multiple linear regression analysis. The return on asset is explained by 58.8 percent by independent variables like earnings per share, price earnings ratio, claim paid and firm size and remaining explained by others variables which are not undertaken. The adjusted R-square for the model is .511 with the standard error of estimate of 3.75. The F-statistic of 7.611 is significant since P-value of .000 is less than .05 at 95 percent confidence level. Thus, the model is good fit. The beta coefficient of price earnings ratio is .001 which indicates that it has no effect on return on assets.

Likewise, having 7.646 beta coefficient, the earnings per share has strongest effect on return of assets. The one unit increase in earnings per share would lead to 7.646 unit increase in return on assets. Likewise, beta coefficient of claim paid is 1.328 indicates that one unit increase in claim paid would lead to 1.328 unit increase in return on assets. Finally, the firm size has beta coefficient of -2.753 indicates that one unit increase in firm size would lead to 2.753 unit decrease in return on assets. The corresponding p-value of earnings per share and firm size have .000 and .044 respectively which is less than .05. Thus, earning per share and firm size has significant impact of return on assets.

Table 6

Regression Anlaysis of PER, EPS, CP and FS on ROE.

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
.671a	.423	.401	5.77	4.876	.034

Model		B	T	Sig.
2	(Constant)	63.244	.732	.470
	PER	-.109	-.458	.650
	EPS	5.664	.860	.396
	CP	-.221	-.044	.965
	FS	2.090	.323	.748

a. Dependent Variable: ROE
b. Predictors: (Constant), FS, EPS, PER, CP

The table 6 depicts the multiple linear regression analysis. The return on equity is explained by 42.3 percent by independent variables like earnings per share, price earnings ratio, claim paid and firm size and remaining explained by others variables which are not undertaken.

The adjusted R-square for the model is .401 with the standard error of estimate of 5.77. The F-statistic of 4.876 is significant since P-value of .034 is less than .05 at 95 percent confidence level. Thus, the mode is good-fit.

The beta coefficient of price earnings ratio is -.109 which indicates one unit increase in price earnings ratio would lead to .109 unit decreases over return on equity. Likewise, having 5.667 beta coefficient, the earnings per share has strongest effect on return of equity. The one unit increase in earnings per share would lead to 5.667 unit increase in return on equity. Likewise, beta coefficient of claim paid is -.221 indicates that one unit increase in claim paid would lead to .221 unit decrease in return on equity. Finally, the firm size has beta coefficient of 2.090 indicates that one unit increase in firm size would lead to 2.090 unit increase in return on assets.

The corresponding p-value of price earnings ratio, earnings per share, claim paid and firm size have .650, .396, .965 and .748 respectively. Thus, there is no significant impact of price earnings ratio, earnings per share, claim paid and firm size on return on equity since the corresponding p-value is greater than .05 at 95 percent confidence level.

Table 7

Hypothesis Results Summary

Hypotheses	Remarks
H1: There is significant relationship between company size and return on assets.	Reject
H2: There is significant relationship between earnings per share and return on assets.	Accept
H3: There is significant relationship between price earnings ratio and return on assets.	Reject
H4: There is significant relationship between claim paid and return on assets.	Reject
H5: There is significant relationship between company size and return on equity.	Reject
H6: There is significant relationship between earnings per share and return on equity.	Reject
H7: There is significant relationship between price earnings ratio and return on equity.	Reject
H8: There is significant relationship between claim paid and return on equity.	Reject

4.4 Major Findings

- Similarly, earning per share has positive relationship with return on assets with magnitude of .681. Further, the corresponding p-value of earnings per share is .000 which is less than .05. Thus, there is significant relationship between earnings per share and return on assets.

- Further, the corresponding p-value of claim paid, firm size, and price earnings ratio is .382, .162 and .496 which are greater than .05. Thus, claim paid, firm size, and price earnings ratio has insignificant relationship with return on assets.

- The correlation between dependent variable return on equity and independent variables such as earnings per share, claim paid, firms size and price earnings ratio.

- It is revealed that claim paid and price earnings ratio have correlation with return

on equity with the magnitude of .009 and .018 respectively. Likewise, the earnings per share and firm size have positive correlation with return on equity with the magnitude of .148, .222 and .140 respectively.

- Further, the corresponding p-value of earnings per share and firm size is .175 and .389 respectively which are greater than .05. Thus, claim paid, firm size and price earnings ratio have insignificant relationship with return on assets.

- The multiple linear regression analysis. The return on asset is explained by 58.8 percent by independent variables like earnings per share, price earnings ratio, claim paid and firm size and remaining explained by others variables which are not undertaken.

- The adjusted R-square for the model is .511 with the standard error of estimate of 3.75. The F-statistic of 7.611 is significant since P-value of .000 is less than .05 at 95 percent confidence level. Thus, the model is good fit.

- The beta coefficient of price earnings ratio is .001 which indicates that it has no effect on return on assets. Likewise, having 7.646 beta coefficient, the earnings per share has strongest effect on return of assets. The one unit increase in earnings per share would lead to 7.646 unit increase in return on assets.

- Likewise, beta coefficient of claim paid is 1.328 indicates that one unit increase in claim paid would lead to 1.328 unit increase in return on assets. Finally, the firm size has beta coefficient of -2.753 indicates that one unit increase in firm size would lead to 2.753 unit decrease in return on assets.

- The corresponding p-value of earnings per share and firm size have .000 and .044 respectively which is less than .05. Thus, earning per share and firm size has significant impact of return on assets.

- The other variables like price earnings per share, and claim paid have corresponding p-value of .982, and .201 respectively which is greater than .05. Thus, earnings per share, and claim paid have no significant impact on return on assets.

- The multiple linear regression analysis. The return on equity is explained by 42.3 percent by independent variables like earnings per share, price earnings ratio, claim paid, and firm size and remaining explained by others variables which are not undertaken.

- The adjusted R-square for the model is .401 with the standard error of estimate of 5.77. The F-statistic of 4.876 is significant since P-value of .034 is less than .05 at 95 percent confidence level. Thus, the mode is good-fit.

- The beta coefficient of price earnings ratio is -.109 which indicates one unit increase in price earnings ratio would lead to .109 unit decreases over return on equity.

- Likewise, having 5.667 beta coefficient, the earnings per share has strongest effect on return of equity. The one unit increase in earnings per share would lead to 5.667 unit increase in return on equity.

- Likewise, beta coefficient of claim paid is -.221 indicates that one unit increase in claim paid would lead to .221 unit decrease in return on equity. Finally, the firm size has beta coefficient of 2.090 indicates that one unit increase in firm size would lead to 2.090 unit increase in return on assets.

- The corresponding p-value of price earnings ratio earnings per share, claim paid and firm size have .650,.396, .965 and .748 respectively. Thus, there is no significant impact of price earnings ratio, earnings per share, claim paid and firm size on return on equity since the corresponding p-value is greater than .05 at 95 percent confidence level.

4.5 Discussions

This study deals with the determinants of profitability of non-life insurance companies in Nepal. The main objectives of this study have been measuring the determining the profitability of listed non-life insurance companies in Nepal. The correlation between dependent variable return on assets and independent variables such as, earnings per share, claim paid, firms' size and price earnings ratio. Similarly, earning per share has positive relationship with return on assets. Thus, this finding is consistent with the

findings of Maria and Ghiorghe (2019), Almajali (2018) and Berheand Kaur (2017). However, the finding is not consistent with Rajiben (2016) since his findings claims that significant impact on profitability.

Further, there is significant relationship between earnings per share and return on assets. This finding is identical to the findings of Hifza (2011). Likewise, the claim paid, firm size and price earnings ratio have negative correlation with return on assets. Thus, this finding is also consistent with the finding of Razak (2012). Further, claim paid, firm size and price earnings ratio have insignificant relationship with return on assets. This finding is supported by the finding of Hifza (2011). However, this finding is contradiction with the finding of Talat and Muhammad (2012), Amal (2012). Hsu-Hua et al. (2012) observed that firm size has positively and significantly influence on insurance company's performance. Thus, this finding is not consistent with this study's findings. It is revealed that claim paid and price earnings ratio have no correlation with return on equity. This study finding is related to Razak (2012). Likewise, the earnings per share and firm size have positive correlation with return on equity. This is consistent with the finding of Charumathi (2012). Similarly, claim paid, firm size and price earnings ratio has insignificant relationship with return on assets. This finding is consistent with the finding of Daniel and Tilahun (2013).

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

The study is concerned with determinants of profitability of non-life insurance companies in Nepal. In Nepal, at present there are 20-listed Non-Life Insurance Companies are operating their business. Among the listed Non-Life Insurance Company, four have been selected for research purpose. Namely, they are Himalyan General Insurance Company Limited, Sagarmatha Insurance Company Limited, Premier Insurance Company Limited and Siddhartha Insurance Limited. These four non-life insurance companies have been purposively selected in terms of rapidly expanding their branches. Thus, purposive sampling techniques have been employed.

As per the nature of research and research problem, the appropriate approach study will be used descriptive research design and casual comparative research design. This method is suitable when the researcher wants to describe present situation with the help of research done according to the past and present. The source of data for this study has been used here is, secondary, considering mainly the annual report of sampled insurance companies as well as the literature reviews and references used before on similar nature of research. The data have been used for this study from 2011/12 to 2020/21 (10 years). The statistical tools consist of mean, standard deviation and coefficient of variation as well as the inferential statistic consists of mainly linear correlation and regression analysis for better evaluation of undertaken variables such as determinants of profitability (firm size, price earnings ratio, earnings per share, and claim paid), also known as independent variables (predictors). Likewise, profitability proxies such as return on equity and return on assets in form of dependent variables.

As per the major findings the beta coefficient of price earnings ratio is -.109 which indicates one unit increase in price earnings ratio would lead to .109 unit decrease over return on equity. Likewise, having 5.667 beta coefficient, the earnings per share has strongest effect on return of equity. The one unit increase in earnings per share would lead to 5.667 unit increase in return on equity. Likewise, beta coefficient of claim paid is -.221 indicates that one unit increase in claim paid would lead to .221 unit decrease

in return on equity. Finally, the firm size has beta coefficient of 2.090 indicates that one unit increase in firm size would lead to 2.090 unit increase in return on assets.

Similarly, the null beta coefficient of price earnings ratio indicates that it has no effect on return on assets. Likewise, affirmative beta coefficient, the earnings per share has positively the strongest effect on return of assets. Likewise, positive beta coefficient of claim paid implies the meaning that claim paid has positive effect on profitability in terms of return on assets. Finally, the negative unstandardized beta coefficient indicates that firms size has negative effect on profitability in terms of return on assets.

5.2 Conclusion

In the light of the evidence, it is crystal clear as per the findings that the most prominent determinants for profitability in Nepalese non-life insurance companies is found to be earnings per share followed by firm size.

The correlation between dependent variable return on assets and independent variables such as earnings per share, claim paid, firms' size and price earnings ratio. Similarly, earning per share has positive relationship with return on assets. Further, there is significant relationship between earnings per share and return on assets. Likewise, the claim paid, firm size, price earnings ratio have negative correlation with return on assets. Further, claim and paid, firm size and price earnings ratio have insignificant relationship with return on assets.

Similarly, the correlation between dependent variable return on equity and independent variables such as earnings per share, claim paid, firms' size and price earnings ratio. It is revealed that claim paid and price earnings ratio have no correlation with return on equity. Likewise, the earning per share and firm size have positive correlation with return on equity. Further, claim paid, firm size and price earnings ratio has insignificant relationship with return on assets.

5.3 Implications

The following implications are made on the basis of findings of this particular study. The findings of the study states that earning per share and firm size has significant impact of return on assets. Thus, the earning per share and firms size has to be well maximized to retain and generate higher profitability in Nepalese non-life insurance

companies. There is no significant impact of claim paid and firm size on return on equity. Thus, paying claims timely does not reduce the profitability in contrast; it strengthens the goodwill of companies. The price earnings ratio has no significant impact on return on equity. Thus, price earnings ratio does not help to determine the profitability as a result it is implied that profitability regarding decisions should not be considered targeting the price earnings ratio. Thus, it is implied that the operating expenses should be reduced or declined to boost up the profitability of Nepalese non-life insurance companies.

REFERENCES

Abate, F. (2012). The impact of operating and financial leverages and intrinsic business risk on firm value. *European Journal of Multidisciplinary Studies, 11*(10), 52-65.

Abate, T. (2012). Does insurance promote economic growth? Evidence from OECD countries. *The Journal of Risk and Insurance, 67*(4), 489-506.

Abhor, R. (2008). Comparative bank efficiency across select ASEAN countries. *ASEAN Economic Bulletin*, *18*(3), 289-304.

Abid, D.,& Mseddi, D. (2004). Factors affecting the profitability of Insurance Companies in Albania. *European Journal of Multidisciplinary Studies*, *1*(1), 352-360.

Ahmadinia, H., Afrasiabishani, J.,& Hesami, E. (2012). A comprehensive review on capital structure theories. *The Romanian Economic Journal*, *15*(45), 3-26.

Almajali, T. (2018). Determinants of bank profitability in a developing economy: Empirical evidence from the Philippines. *Asian Academy of Management Journal of Accounting and Finance, 4* (2), 91-112.

Amidu, A. M. (2007). Liquidity-profitability tradeoff: an empirical investigation in an emerging market. *International journal of commerce and management*, *14*(2), 48-62.

Amidu, B. (2007). Financial development and economic growth: Views and agenda. *Journal of Economic Literature, 35*(2), 688-726.

Berhe, B., & Kaur, X. Y. (2017). A study on the performance of insurance companies in Ethiopia. *International Journal of Marketing, Financial Services & Management Research, 2*(7), 138-150.

Bhattarai, B. P. (2020). Factors influencing profitability of insurance companies in Nepal. *International Journal of Management*, *11*(9), 121-134.

Chen, L., & Wong, R. (2004). Leverage investment and firm growth. *Journal of Financial Economics, 40*(1), 3-29.

Chen, T., & Wong, X. (2004). *Consolidation in the European insurance industry: do mergers and acquisitions create value for shareholders?* Brookings-Wharton Papers on Financial Services ed. 2004, 217–258.

Daare, T. (2016). On the determinants of profitability of Indian life insurers: An empirical study. *Proceedings of the World Congress on Engineering, 1(12), 4-6.*

Daare, W. J. (2016). Determinants of non-life insurance companies' profitability: an empirical study in India. *International Journal of Innovative Research and Advanced Studies, 3*(13), 6-11.

Das, T., Davies, A., & Podpiera, M. J. (2003). Performance determinants of general insurers in Pakistan. *Actual Problems of Economics, 12*(138), 181-192.

Davies, N., Podpiera, R., & Das, M. U. S. (2003). *Insurance and issues in financial soundness*. International Monetary Fund.

Eljelly, B., & Abuzar, R. (2004). The economic significance of insurance markets in developing countries. *The Journal of Risk and Insurance. 57*(3), 487-498.

Eljelly, M., & Abuzar, T. (2004). Determinants of insurance companies' profitability in Pakistan. *Journal of International Academic Research, 1*(3), 315-320.

Hamal, J. B. (2020). Factors affecting profitability of Nepalese non-life insurance companies. *Journal of Nepalese Business Studies, 13*(1), 23-35.

Isayas, Y. N. (2022). Determinants of banks' profitability: Empirical evidence from banks in Ethiopia. *Cogent Economics & Finance, 10*(1), 20-33.

Iswatia, T. A., & Anshoria, J. (2007). Determinants of insurance companies' profitability Analysis of insurance sector in Ethiopia. *International Journal of Research in Finance and Marketing, 7*(4), 124-137.

Iswatia, T., & Anshoria, R. R. (2008). Determinants of bank profitability in a developing economy: Empirical evidence from the Philippines. *Asian Academy of Management Journal of Accounting and Finance, 4* (2), 91-112.

Kamau, B., & Njeru, R. (2016). *What is the role of insurance in economic development?* Zurich: Government and Industry Affairs.

Kamau, F.,& Njeru, A. (2016). Effect of liquidity risk on financial performance of insurance companies listed at the Nairobi securities exchange. *International Journal of Science and Research, 5*(10), 867-872.

Maria, U., & Ghiorghe, X. (2019). The effect of foreign entry and ownership structure on the Philippine domestic banking market. *Journal of Banking and Finance, 27*(12), 2323-2345.

Mirieand, Z. A., & Cyrus, A. A. (2014). The Performance Evaluation of Life Insurance Companies of Pakistan. *Journal of Managerial Sciences, 1*(3), 52-74.

Mseddi, R., & Abid, T. (2004). Efficiency of American life insurance companies using DEA approach. *ELK Asia Pacific Journal of Finance and Risk Management, 7*(4), 23-46.

Muller, J. (2012). Determinants of dividend payout ratios in Ghana. *The journal of risk finance, 7* (2), 233-245.

Muller, R. T. (2012). The effect of foreign entry and ownership structure on the Philippine domestic banking market. *Journal of Banking and Finance, 27*(12), 2323-2345.

Naser, H., & Mokhtar, E. (2004). A comprehensive review on capital structure theories. *The Romanian Economic Journal, 15*(45), 3-26.

Naveed, K. D., Gatsi, J. G., Gadzo, S. G., & Akoto, R. K. (2010). Degree of financial and operating leverage and profitability of insurance firms in Ghana. *International Business and Management, 7*(2), 57-65.

Naveed, R. T., Zulfqar, B. V., & Ahmad, V. (2011). Financial development, growth, and the distribution of income. *Journal of Political Economy, 98* (5), 1076-1107.

Omondi, T., & Muturi, V. (2013). Does insurance promote economic growth? Evidence from OECD countries. *The Journal of Risk and Insurance, 67* (4), 489-506.

Ostroff, T., & Schmidt, R. (1993). *International Economics.* [11th Edition]. United States:Fordham University.

Ostroff, W. J., & Schmidt, K. (1993). Determinants of non-life insurance companies' profitability: an empirical study in India. *International Journal of Innovative Research and Advanced Studies, 3*(13), 6-11.

Rajiben, V. (2016). Financial intermediation and economic performance: Historical evidence from five industrialized countries. *Journal of Money, Credit and Banking, 30* (4), 657-678.

Saeed, R. & Khurram, P. (2015). Testing of financial performance of Nepalese life insurance companies by CARAMELS Parameters. *Journal of Business and Management*, 2(3), 22-34.

Saeed, V., & Khurram, R. (2015). Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Macrothink Institute*, *4* (2), 266-289.

Sah, L. K., & Magar, M. R. (2021). Factors affecting the profitability of Nepalese insurance companies. *Nepalese Journal of Insurance and Social Security*, *4*(1), 87-99.

Shin, R., & Soenen, T. (1998). Investment Portfolio of Insurance Companies: Empirical Study of Nepal. *Hermenutics: A Biannual Refereed International Journal of Business and Social Studies*, *3*(2), 26-47.

Walker, B. (2001). On the determinants of profitability of Indian life insurers: An empirical study. *Proceedings of the world congress on engineering, 1*(2), 4-6.

Walker, R. (2001). A study on the performance of insurance companies in Ethiopia. *International Journal of Marketing, Financial Services & Management Research, 2* (7), 138-150.

Zubairi, J. B. (2013). Insurance and its business in Nepal. *Journal of Nepalese Business Studies*, *7*(1), 70-79.

APPENDIX

Year	Entities	ROA	FS (total assets)	PER	SMR	ROE	EPS	CP
2011/12	Himalayan Insurance	2.08	545191577.8	17.76	0	6.22	11.26	405123000
2012/13		-7.14	766266351.3	-3.63	0	-43.12	-54.26	411110000
2013/14		8.26	876832887.5	2.53	0	36.36	71.89	183163000
2014/15		8.06	1157864781	15.8	0	20.67	37.34	162653000
2015/16		7.98	1775125509	7.14	2.5	25.00	52.96	848242000
2016/17		9.50	1377676564	33.85	3.25	18.92	40.77	4378258000
2017/18		5.74	2120763710	23.57	3.78	15.86	31.61	1654743855
2018/19		5.74	2470628396	32.59	1.67	7.93	13.81	3493816730
2019/20		7.43	2721719972	17.78	1.91	11.54	19.69	941894018
2020/21		5.90	2942794729	25.8	3.63	9.22	16.24	417254467
2011/12	Premirer Insurance	4.79	393544769.3	8.49	0	10.95	18.5	79167523
2012/13		5.23	437934949.7	6.15	0	11.88	22.45	84313522
2013/14		5.95	575123501.4	4.25	0	15.21	29.18	97538692
2014/15		6.16	744087824	22.85	0	3.90	39.05	152793202
2015/16		11.31	1160112581	9.86	0	4.56	45.63	272058328
2016/17		11.94	1546527505	44.62	3.45	24.73	49.42	1346493393
2017/18		4.55	3426011814	48.36	4.2	15.75	34.75	941485849
2018/19		3.41	2678193438	71.96	2.46	1.56	15.63	1277587134
2019/20		8.97	2963982230	19.81	2.16	2.47	24.74	1039050270
2020/21		11.04	3125800431	19.17	2.94	3.21	32.13	1031868613
2011/12	Sagarmatha Insurance	19.63	462793916.2	4.32	0	27.71	70.33	146171982
2012/13		23.13	594239629.5	3.26	0	32.18	106.39	163917635
2013/14		23.98	746558312.6	8.53	0	32.61	69.3	186962605.4
2014/15		22.58	899481956	19.23	0	27.10	65.54	207333625
2015/16		3.13	2400305891	50.24	3.49	9.19	21.05	348214734
2016/17		9.22	2243538624	51.24	4.5	20.31	46.86	1035443390
2017/18		11.41	2397626628	29.41	5.16	22.26	55.76	1270537592
2018/19		12.28	2711231925	21.52	1.62	21.57	62.26	1177035187
2019/20		4.72	4133408671	29.03	1.87	112.65	19.5	956421643
2020/21		8.12	4730070686	18.25	4.44	18.17	38.36	1046336279
2011/12	Siddhartha Insurance	7.77	366309020.4	3.69	0	19.75	28.46	109533315
2012/13		7.56	530364735.3	2.64	0	21.97	40.1	123366124
2013/14		5.46	783842352.9	6.29	0	19.01	32.41	174943875
2014/15		10.99	1096549834	16.65	0	25.42	48.05	404883079
2015/16		1.15	14835699535	10.53	3.33	25.86	61.62	449082676
2016/17		10.07	1856725561	46.7	4.39	22.31	53.96	812162055
2017/18		7.41	3027548594	31.57	1.52	21.04	47.51	695536383
2018/19		8.33	3454920649	14	1.95	21.49	49.29	975730411
2019/20		5.66	4405397913	15.38	2.43	13.59	29.58	1161398187
2020/21		8.59	3912149376	17.26	3.94	15.60	33.6	924249615