FACTORS AFFECTING PROFITABILITY 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 Degree in Business Studies

By

Abinash Adhikari

Exam RollNo: 38998/21

T.U.Registration No.:7-2-39-86-2015

National College

Tribhuvan University

Kathmandu, Nepal

December, 2024

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Factors Affecting 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 it has been proposed and presented as part of requirements for any other academic purposes.

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

Abinash Adhikari

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Date: December 4, 2024

REPORT OF RESEARCH COMMITTEE

Mr. Abinash Adhikari has defended research proposal entitled "Factors Affecting 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 suggestions and guidance of supervisor Dr. Deelip Raj Pandey and submit the thesis for evaluation and viva voce examination.

Mr. Nava Raj Heka
Asst. Campus Chief
Signature: ……

Dissertation Proposal Defended Date:

August 2, 2024

Dr. Deelip Raj Pandey
Supervisor
Signature: ……

Dissertation Submitted Date:

November 14, 2024

Dr. Basudev Giri
Head of Research Committee
Signature: ……

Dissertation Viva Voce Date:

December 4, 2024

APPROVAL SHEET

We have examined the dissertation entitled "Factors Affecting Profitability of Non-Life Insurance Companies in Nepal" presented by Abinash Adhikari for the degree of **Master of Business Studies.** We hereby certify that the dissertation is acceptable for the award of degree.

_____

Dr. Deelip Raj Pandey
Dissertation Supervisor

_____

Internal Examiner

_____

External Examiner

_____

Dr. Basudev Giri
Chairperson, Research Committee

_____

Dr. Madhav Prasad Baral
Campus Chief

Date: …….

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ABBREVIATIONS

NICL	: Nepal Insurance Company Limited
SICL	: Shikhar Insurance Company Limited
PRABHU	: Prabhu Insurance Company Limited
NECO	: Neco Insurance Company Limited
ROA	: Return on Assets
ROE	: Return on Equity
Com. Siz.	: Size of The Company
LIQ.	: Liquidity Ratio
VOC	: Volume of capital
F.A	: Fixed Assets
ANOVA	: Analysis of Variance
FY	: Fiscal Year
VIF	: Variance Inflation Factor

ABSTRACT

This study is regarding the Factors Affecting Profitability of Non-Life Insurance Companies, in Nepal. The main reason of this study were to explore the conditions of company specific profitability factor of non-life insurance companies, to explore the relationship between profitability factors like size of company, fixed assets, liquidity, volume of capital, and growth rate of premium with profitability.

A descriptive research design has been used, utilizing a convenience sampling method. The research focused on four non-life insurance firm over the fiscal years 2013/14 to 2022/23. Data for the study were collected from the respective company reports. The analysis of the data was conducted using correlation coefficient techniques and regression analysis. These methods were utilized to assess the extent and nature of the relationships between the variables. The in-dependent variables included company size, liquidity, capital volume, fixed assets, and growth rate, while the dependent variables were return on assets and return on equity.

The study concludes that the growth rate and capital volume are the primary positive determinants influencing the profit of non-life insurance firms. The findings indicate that both the growth rate and capital volume positively affect R0E and R0A. Conversely, the size of the company negatively impacts the return on assets for non-life insurance in our nation. Therefore, an increase in the growth rate and capital volume correlates with an enhancement in ROE, while the opposite is true for non-life insurance in Nepal.

Key Words: Liquidity, Return on Equity, Non-life insurance, company size, Return on Asset, Fixed assets, Growth rate, Volume of capital.

CHAPTER-I
INTRODUCTION

1.1Background of the study

The financial institutions have a crucial work in growth of the nation. They behave as intermediary between customers and investors, helping with the selection process, facilitating money transfers, offering management systems, controlling risks, and encouraging capital formation, stability, and economic efficiency. (Gupta, 2013). Generally 2 types of financial institutions, one is depository who accepts deposit from general public and another is non-depository institutional like insurance companies which collect premium. Insurance companies have a important role in the financial services sector by offering advantages to consumers through savings, pooling funds for large investments, diversification, risk-sharing, and protection against unexpected losses pertaining to life and property. They also contribute to the economic growth of both developed and developing nations by using funds from depositors to those in need of capital for promising business ventures. This process involves transferring risk from the insurer to the insured, facilitating the mobilization of resources. In today's world, characterized by increased risks and uncertainties brought about by globalization, liberalization, innovation, and unforeseen disasters, the necessity for effective risk management has become apparent as a consequence of economic progress. The insurance industry is essential in providing protection against risks encountered by communities, thereby reinforcing developmental stability and serving system for gathering and distributing public funds. The expansion of insurance related industry in Nepal has a direct positive impact on the economy.

1.1.1 Overview of insurance industry/business in Nepal

Insurance; an agreement established by firm, organization, or government to ensure compensation for losses, damages, illnesses, deaths, and similar events in exchange for regular payments. In other words, it constitutes a protective measure against potential losses or failures. It is a well-known fact that result come with uncertainty. Every type of business involves inherent risk. No business is free from risk, and there is always potential for loss. This uncertainty is not limited to businesses; it also applies to households, as we cannot predict when an earthquake might occur. This situation remains challenging. So far, abled to transfer the risks primarily associated with natural disasters

or accidents through insurance, yet we cannot eliminate these risks entirely. Controlling natural disasters or accidents is beyond our abilities.

Insurance acts as precautionary tool that parties use to address losses arising from unfortunate events. Insurance services alleviate the hardships caused by unpredictability. As such, insurance provides relief through financial compensation during times of significant need. In times of profound grief or necessity, insurance presents substantial financial support. The complexities of insurance and commercial risks are noteworthy. In addition to typical trading risks, entities face various hazards that stem from both nature and human activities, necessitating careful risk management practices. Risk management involves techniques for identifying, assessing, and addressing potential risks. Once a company has identified the risk it faces, the financial implications of the risk must be assessed before deciding to deal with the risk; this may include recognizing some of its own risks and replacing others with various tools, including insurance. Insurance is mechanism of lowering risk by transferring it.

The first insurance company in Nepal was founded in 2004 BS and is known as Nepal Malchalani Tatha Beema Company. This organization was created from Companies Act and is entirely owned by Nepal Bank Limited. Following the political changes of 2046 BS. Government embraced liberal economic policies, leading to the entry of several new insurance firms into the market. In 2046, various life and non-life insurance were granted permission to operate in Nepal. Additionally, the National Life and NonLife insurance Company formed in 2044 BS as private enterprise engaged in this industry.

(Investor paper, 2020).

There are basically 4 types of insurance companies in Nepal. They are as follows:

Table 1 ***Total number of insurance companies***

SN	Type of insurance	Number of insurance
1	Life Insurance	14
2	Nonlife insurance	14
3	Reinsurance	2
4	Micro insurance	7
	Total	**37**

Source: www. nia.gov.np

1.1.2 Overview of nonlife insurance company business in Nepal under the study

Following the political transformations of BS 2046, the government implemented liberal economic policies, leading to an influx of new insurance industry companies in the market. Consequently, non-life insurance companies were permitted to operate in alignment with economic liberalization policy adopted by the Nepalese government in the fiscal year 2046/47 BS. In 2044 BS, National Life and General Insurance Company Limited was founded as a private entity engaged in business (Investor Paper, 2020).

Non-life insurance represents agreement between individuals and insurance companies, where individuals commit to paying premiums, and in exchange, the insurance companies promise to compensate a specified sum for asset loss due to various incidents or accidents, as per their agreements. Non-life insurance products encompass auto insurance, fire insurance, marine insurance, aviation, and more.

The insurance sector is one of the fastest-growing industries in Nepal, particularly since the implementation of liberalization reforms, which also included the insurance industry. This sector is vital to the overall financial framework of the country. A study indicated that net premium collection from 1993/94 to 1997/98 showed an upward trend, contributing to GDP growth as well (Thapa, 2056).

The Nepal Insurance Authority functions as the regulatory body for insurance sector, operating under the provisions of the Insurance Act of 1992. The introduction of a new insurance act in 2049 saw a substantial increase in the establishment of both life and non-life insurance businesses, marking a significant period in the history of the insurance sector in Nepal. Numerous modern insurance companies emerged with considerable private sector input, significantly contributing to the country's economic advancement. (Singh, 2005)

1.1.2.1 Profile of the nonlife insurance companies under study

Neco Insurance

Neco Insurance Co., Ltd. is a private company registered under the Companies Act 2063 BS. It was incorporated in 2051 BS. The company has been carrying on general insurance industry in Nepal since 17th Jestha 2053 under a license given by the Nepal Insurance Chamber. Its paid up capital stood at Rs 174.99 million, gross premium written at Rs 285.38 million and net profit at Rs 55.31 billion for the financial year 2079-80. (Nepal Insurance Authority Annual Report 2079/80).

Nepal Insurance

Nepal insurance company was established in 2051 BS and formed as general insurance related company from 17th jesth 2053 after receiving a license under the insurance act. It has been providing insurance service since July 1996 AD. It has 58 branches spread across countries. It has Rs 40.01 net profit Rs 219.48 total premium and Rs 158.58 paid up capital in FY 2079/80. (Nepal Insurance Authority Annual Report 2079/80).

Prabhu Insurance

Prabhu insurance company was formed in 2053 BS. It has Rs 137.61 cores paid up capital, Rs 165.87 total premium and Rs 24.15 net profit generating nonlife insurance company in FY 2079/80. (Nepal Insurance Authority Annual Report 2079/80).

Shikhar Insurance

Shikhar insurance company formed in 2061 BS. It has Rs 265.49 crores capital, Rs 30.14 crores reserve, Rs 531.61 crores total premium collection and Rs 40.32 crores net profit for the year of FY 2079/80. (Nepal Insurance Authority Annual Report 2079/80).

A company's performance is reflected in the company's profitability in its annual financial statements. Profitability stems from a company's ability to deploy its assets to generate maximum revenue in an effective and efficient manner. A positive financial environment is essential for establishing an efficient, equitable, secure, and stable insurance market that serves to benefit and safeguard policyholders. Profitability is used for identifying whether a company is valuable for investment opportunity or not. Profitability is one of the most important factors in financial management since the main objective of financial management is to maximize shareholder wealth. Profitability is not only for better solvency positions of insurance companies. One measure of profitability is return on assets and other is return on equity. ROA shows the overall performance of the firm and ROE shoes the return and growth of owner’s fund. Profitability attracts investors, improves the level of solvency, strengthens confidence. Thus major objectives of company is to gain profit as an enhancing economic efficacy. So that profit is major indication to grow, diversify and enhancing quality service in financial sectors. The profitability of a non-life insurance company is influenced by external and internal factors. Internal factors focus on the characteristics of the company, while external factors deal with industry-related and macro-economic variables.

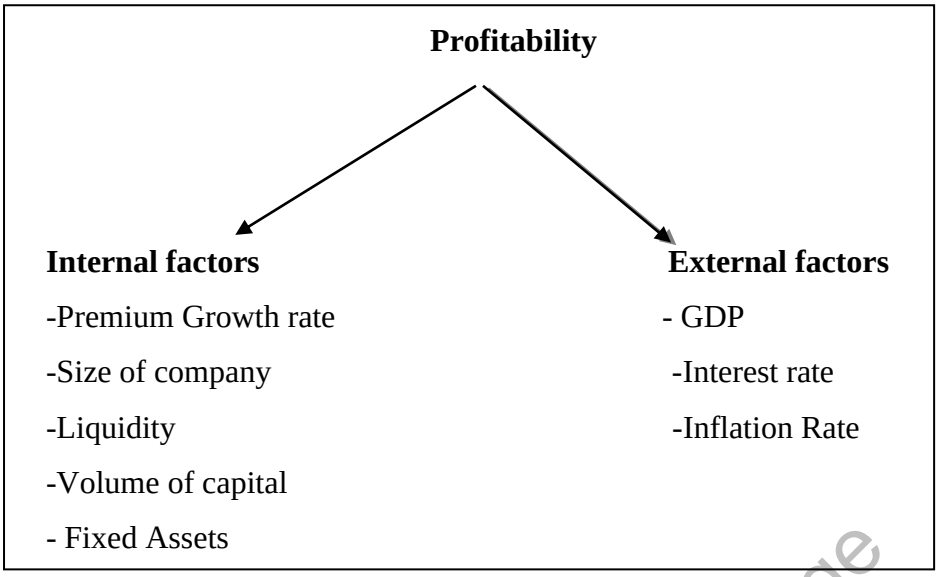


Figure1 Factors of determinants of profitability

The financial health of insurance has become a major concern, as insurance firm are declare bankrupt every year. Due to which policyholders feel in serious trouble. Therefore, regular and rigorous evaluation and monitoring of insurance companies' financial status by regulators and insurance company management is an essential task.(Das, Davies and Podpiera, 2003)

Examining the performance of insurance companies is important because the insurance industry is getting challenges such as increased competition, consolidation, solvency risk, and a changing regulatory environment. The issue of corporate efficiency in the industry is clearly important in determining how the industry will respond to these challenges and which companies are likely to survive. (Berger, 1997)

Profit is main goal of financial management since it is one objectives of management to maximize the wealth of the owners (Harrington, 2005). From 2008 to 2016, the reports of companies in Nepal show a large variation in profits. Such variation in profits among insurance companies suggests that company-specific and external factors have a significant impact on the profit ability of firm. It is therefore important to identify these factors and know how they can help take steps to improve the profitability of non-life and help investors predict the profitability of non-life insurance. Profitability of non-life insurance companies is a concern for policyholders, shareholders, regulators, and the government. Financially sound non-life insurance companies can offer higher premiums to their policyholders and higher dividends to their shareholders. They can also pay more taxes to the government, create more jobs, and provide more resources to the government and private sector than less financially sound companies. Thus, profit ability helps in

allocating funds in an appropriate manner to support business activities in the economy. The determinants of profitability of financial institutions have attracted the interest of managers, financial markets, and regulators as well as academic research.

This research has been explored firm specific determinants of profitability in non-life insurance in Nepal. It helps to investors, promoters, owners, managers and other stakeholders and society. This research will be beneficial to enhance efficiency, stability, sound growth and diversify and make appropriate decision, plan, and policies, strategy based upon research or rational conclusion. It also contributes to the main body of literature for further empirical evidences on the issue of non-life insurance performance.

1.2 Statement of Problems

General insurance companies provide economic and social benefits to society through the prevention of losses, the reduction of anxiety, and the promotion of employment. The general insurance industry is part of the economic protection and recovery plan, and if the industry operates successfully, it can release energy to other industries and the development of the country. To achieve this, general insurance requires sufficient financial soundness or profitability. Therefore, in addition to measuring the financial performance of general insurance companies, it is also necessary to understand the factors that directly affect the financial performance of the industry. The performance of general insurance companies should be significant when considering the issue of factors that determine profitability. This research has been trying to examine factors that influence on profitability. The research questions are:

i. What are the factors generating profitability of Nepali non-life insurance companies?

ii. What is the relation between firm-specific influencing factors like firm size, liquidity, amount of capital,fixed assets, premium growth rate with return on assets?

iii. What is the relationship between firm-specific influencing factors like firm size, liquidity, amount of capital, fixed assets, premium growth rate with return on equity?

1.3Objectives of the study

In particular, the main objective of study was to measure extent to which these influencing factors affect the profit ability of non-life insurance and to determine the relation between these company-specific factors. The major objectives are:

i. To explore the factors generating profitability of non-life companies in Nepal.

ii. To analyze the relationship between firm-specific influencing factors like firm size, liquidity, amount of capital, fixed assets, premium growth rate with return on assets.

iii. To evaluate the relationship between firm-specific influencing factors like firm size, liquidity, amount of capital, fixed assets, premium growth rate with return on equity.

1.4 Rationale of the study

Despite the importance of non-life insurance to the overall growth of the Nepalese economy (which is influenced by industry performance and profitability), very few researchers have studied this area. On best of researchers knowledge, no further research has been conducted. There is a need to address the performance issues of non-life insurance companies. Therefore, this study has highlighted this gap and encouraged others to research in this area and made recommendations accordingly. Through, that to choose the right decision, policy, strategy to the management and to the general public.

This study is beneficial to the policy maker; investor and manager to make rational decisions for maximize its profitability and mitigate risk of the nonlife insurance.

The observe has theoretical importance because it enables to feature the present literature to them who will perform in addition studies paintings in profitability and who've eager hobby in Nepalese financial system and non-existence coverage enterprise. Further from the observe the stakeholders could get data to make rational choice at the same time as making funding on nonlife coverage companies, and additionally it'd be beneficial for the benchmarking of the overall performance of nonlife coverage enterprise in Nepal.

1.5 Research Hypothesis

A hypothesis can be known as a logically suspected relation among two or more variables, expressed in the form of a testable statement. Hypothesis testing indicates whether the difference between the calculated statistics and the hypothesized parameters is significant. The hypothesis for study are:

H1: There exist significant positive relation of Growth Rate and Return on Equity.

H2: There exist significant positive relation of Growth Rate and Return on Assets.

H3: There exist significant positive relation of Volume of Capital and Return on Equity.

H4: There exist significant positive relation of Volume of Capital and Return on Assets.

H5: There exist significant negative relation of Company size and Return on Equity.

H6: There exist significant negative relation of Company size and Return on Assets.

H7: There exist significant negative relation of liquidity and Return on Equity.

H8: There exist significant negative relation of liquidity and Return on Assets.

H9: There exist significant positive relation of fixed asset and Return on Equity.

H10: There exist significant positive relation of fixed asset and Return on Assets.

1.6Limitations of study

Limitations are as follow:

i. Study focuses only on some specific internal factors.

ii. The sample non-life insurance may not be representative of the population.

iii. This study is using secondary data sources.

1.7 Organization of the report

ChapterI-Introduction

It has background information, the problem statement, the objectives, theoretical rationale, limitations, research hypotheses and organization.

ChapterII-Review of literature.

It contains a conceptual overview, a summary of related research, a conclusion to highlight research gaps.

ChapterIII-Research Methodology

This includes research design, sampling process, data collection procedures, analytical techniques, models, and variables.

ChapterIV-Results and Discussion.

It presents the results, finding and discussion.

Chapter-V- Summary and Conclusion.

Last chapter contains a summary, conclusions & implications.

References and relevant annexed presented at last.

CHAPTER-II
REVIEW OF THE LITERATURE

It focuses available literature and discusses the factors impacting the profit ability of non-life insurance under study. This section presents the various literature conducted under the selected variables. This chapter also reviews the relevant accounting analysis literature as well as journals, books and papers of study made earlier.

2.1Conceptual review

Factors impacting the profit of non-life insurance have received little attention in the literature compared to comprehensive studies on financial sector. This is due to the differing findings on the factors impacting the profit ability of the non-life insurance industry. These studies are presented below with their main empirical findings.

2.1.1Conceptual framework

It explains systematic investigation of the relation among in-dependent and dependent variables to explain the company-related factors that affect the profits of non-life insurance companies. This helps to identify and define the research problem objectives.

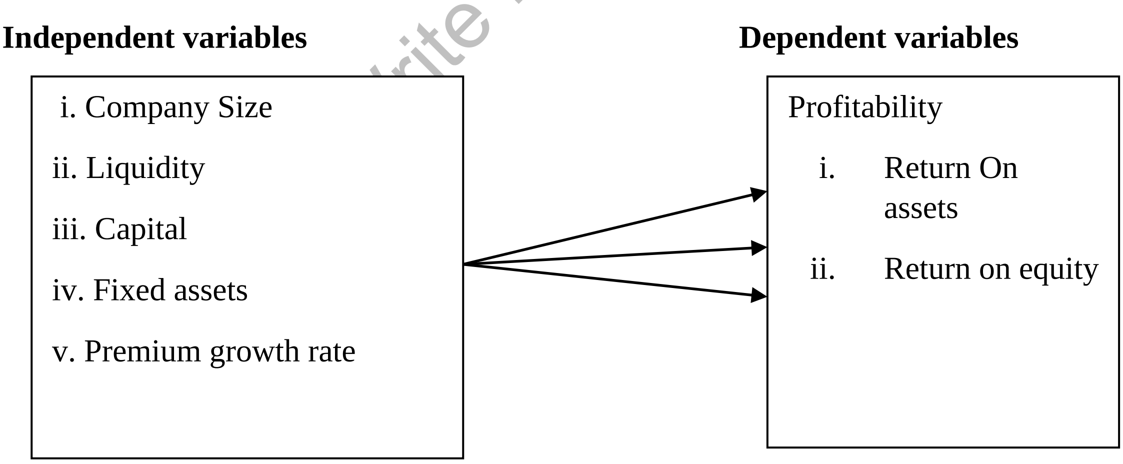


Figure2: Factors for affecting profit of nonlife insurance

Source: Chideh O. and Sorayaei, A., 2019

Figure 2 The conceptual framework examines how financial indicators such as firm size, liquidity, capital volume, fixed assets, and premium growth rate affect a firm's profitability and growth. From the numerous factors that affect profitability, the study selected the most relevant factors for the Nepalese context. Meanwhile, these factors can be easily measured using data provided by general insurance companies in Nepal.

2.1.2 Profitability and its determinants

2.1.2.1 Profitability (dependent variables)

It can be either accounting profit or economic. That is, it means that income exceeds expenses over a certain duration. According to Koller(2011), profit is reliable and important factor since it is a general indicator to determine the capacity of an insurance to increase its profit.

Oxford English Dictionary, the simple definition of profit is "money obtained from a business activities, difference of the amount earned with spent amount " (Hornby,1996). Also describes the financial profit in trading. In other words, it is the amount of surplus that arises after a certain period of trading.

The major objective of business is to make a profit. h. All the products and services the company sells. Profit is the amount left after deducting overhead costs from sales. Thus, profitability is the capacity of a company to create profits. It indicates the company's general management skills, economy, efficiency and growth potential, which helps define the company's future, diversification of services and contribution to economic development. Another concern is maximizing the owners' wealth. The main objective of a company is to generate profits to ensure the long term stability of firm in rapidly changing scenario.

Acquiring profit for firm is not only thing but mainly generating a stable profitability for long run is things to consideration for growth of organization and any country. Its challenging things that the internal and external forces of factors which influences continuously the company’s profitability. Accounting and financial result is the financial result of the formal business conducted by a company within a certain period of time. Financial performance is a measure of the increase in value evidenced by the increase in business revenue, profits, and enterprise value. Both external and internal factors that affect the revenue of a non-life insurance company. Internal factors focus on the characteristics of the non-life insurance company. The key factors for financial result are R0A and R0E. R0A indicates effectiveness/efficiency of the overall management, while ROE indicates the increase in asset value. In this part of the study, the following profitability measures are most commonly used in the literature:

a. R0A

The return on assets serves as a critical gauge for assessing the profitability of a financial institution. It is utilized for quantifying the income produced from the company's asset utilization. The ratio is determined by dividing the company's net profit by its total assets. It also indicates the company's management ability to create profit from deploying existing resources (Bhatia, 2007). Kusa & Ongore (2013) showed that companies with high return on capital have effective management, which shows that firm management is capable to use company's resource effectively to generate net profits.

b. R0E

It shows the effectiveness of management in generating additional profits for shareholders. In other words, return on equity indicates the profit of firm. How much profit shareholders are making from the money they invested. Return on equity is often used by traders to identify companies whose total capital is growing rapidly. As a result, it has good impact on stock prices. They increase when shareholders' wealth is maximized (Rothschild, 2006).

2.1.2.2 Firms Related drivers for profit

Firm specific drivers of profitability explained as.

a. CompanySize

The company measure decided by numerous variable like no of representative, number of branch, add up to resources. Firm measure is anticipated to advance economies scale and decrease the fetched of gathering and handling data. Execution is likely to extend in measure, since bigger firms will have way better chance broadening, more financial advantage, and in general superior taken a toll proficiency (Boyd and Levine 2001). In this ponder, add up to resource is utilized for Company Measure. Estimate of the nonlife company which is measured in terms of normal log of add up to resources. A bigger nonlife company can pick up competitive benefits through effective offices additionally decrease hazard through more noteworthy portfolio expansion.

b. Liquidity

The liquidity of life insurance companies reflects their capacity to meet current obligations, which typically include operational expenses and compensation payments in the event of claims. Firms with substantial liquid assets are less prone to insolvency, as they can readily convert these assets into cash, even under challenging circumstances.

c. The volume of capital

Capital level of any firm is appeared throug bookkeeping condition i.e. add up to resources - add up to liabilities. In thinks about related to components influencing the productivity of nonlife companies, the volume of capital is calculated by proportion of shareholder value to add up to resources, it can be communicated by the carrying sum of capital. These thinks about have appeared that there's a factually critical positive connection between the volumes of capital nonlife firm with their benefit, communicated by ROA (Al-Shami,2013 and Malik,2011)

d. Fixed assets

Fixed resources calculate by the proportion between settled resources to add up to resources. Different considers appear the affect of settled resources within the productivity of nonlife companies as conflicting. Malik, (2011) in his ponder the components influencing the productivity of nonlife companies in Pakistan in 2011 appears measurably critical relationship between settled resources and productivity of nonlife companies. He contends that more noteworthy the weight of settled resources in add up to resources, benefit will be indeed more noteworthy. Yuqi Li (2007) conducted think about within the UK appears that there's no critical factual relationship between settled resources and productivity of nonlife companies.

e. Growth rate of premium of company

It is typically represented by year-over-year % change in their total assets. Specifically, for insurance firm, the growth is determined by the % change in the total amount of premiums agreed upon. It is essential for these companies to continually enhance their resources to improve performance and, as a result, increase profitability. Nevertheless, the correlation between a company's growth rate and its profitability may not always be positive, contrary to common expectations. In certain instances, a significant increase in business may expose an insurance company to greater risks, necessitating an increase in its technical reserves as mandated by regulatory requirements (Burca & Batrinca, 2014).

2.2Related studies

2.2.1International articles

Malik (2011) performed study to explore the factor influencing the profit ability of insurance firm in Pakistan. This research focused on firm-specific variables, including the age of the company, company size, capital volume, leverage ratio, and loss ratio, with profit ability measured by R0A. The study identified return on assets as a crucial indicator of profitability for insurance firms. Profitability, as the dependent variable, was found to

be influenced by the independent variables of company age, size, capital volume, leverage, and loss ratio. The sample comprised 35 life and nonlife insurance, covering the from 2005 - 2009. Multiple regression were employed to analyze the relationships between the independent and dependent variables. The results indicated no significant relation among profit and the company age. However, significant positive co-relation outlined between company size and profitability, as well as between capital volume and profitability. Conversely, both the loss ratio and leverage ratio exhibited a significantly negative relation with profit.

Burca and Batrinca (2012) examined the factors affecting financial result in the Romanian insurance for 2008-2012, utilizing specific panel data techniques. Their analysis focused on the factors of financial performance within the insurance industry, measured by R0A. It concluded that financial leverage, growth in underwriting risk and gross written premiums negatively impacted financial performance, while comp.size, solvency margin and retained risk were positively correlated with financial performance.

Kaya (2015) conducted a study on the firm related influencing the profi of non-life insurance in Turkey. The research analyzed data from twentyfour non-life insurance firms over the 2006 - 2013, employing both single and multiple regression models. The dependent variables included company size, leverage, age, loss ratio, current ratio, premium retention, and premium growth. The findings indicated that the profit of non-life insurance in Turkey had a statistical significant and positive co-relation with both comp. size and premium growth. Conversely, profitability exhibited a statistically significant and negative relationship with the age of the company, current ratio and loss ratio.

Jibran (2015) examined factors influencing profit of non-life insurance firm in Pakistan, focusing on both firm specific and macroeconomic variables. Profit ability was checked using R0A and R0E. The study considered financial ratios such as liquidity, premium growth, current ratio, and firm size, analyzing data from 20 non-life insurance companies in Pakistan. Results identified current assets had a significant impact on ROA but were insignificant concerning ROE. Additionally, control variables found playing a role in determining profitability.

Jibran (2016) investigated impacts of internal and external factor on profitability of non-life insurance in Pakistan through the use of panel data. The independent variables included firm size, premium growth, liquidity,GDP, and inflation. The study highlighted that current ratio, premium growth, and firm size were critical determinants of the firms' profitability. Furthermore, the results indicated that R0A and R0E was affected by

different sets of variables, with macroeconomic factors also proving significant in assessing the profit ability of these firms.

Daare (2016) examined the firm specific and economic factors influencing the profitability of non-life insurance firm in India. To fulfill the study's objectives, financial reports from eight general insurance firms (comprising two public and six private entities) were analyzed, utilizing panel data from 2006 to 2016. The author identified several statistically significant variables, including company size, liquidity, and inflation, as factor responsible of profit in the Indian insurance sector. Research suggests insurance managers should focus on effectively managing current assets and liabilities to sustain an optimal liquidity position, while also considering the impact of inflation as an external variable. The analysis employed various fundamental metrics, including R0A and R0E, revealing that factors such as age, liquidity, size, inflation rate, loss ratio, gross domestic product growth rate, and premium growth negatively affect ROA. Conversely, liquidity, age, and GDP growth rate positively affect the ROA of non-life insurance companies in India.

Kazimierz (2016) studied the factors impacting the profitability of general insurance firm in Poland, utilizing a panel dataset from 2006 to 2013. The study measured six financial performance indicators to capture various aspects of insurance operations, considering both firm-specific and macroeconomic variables. A weighted least squares method, along with intergroup methods for each of the 6performance model, was employed to estimate the parameters. The empirical findings indicated a statistical significant relation among the examined variables and the profit ability of non-life insurance companies in Poland. Specifically, underwriting and net operating expenses exhibited a negative impact, while the comp. size positively influenced the overall profitability of non-life insurance firms in Poland.

Lire (2016) conducted a study on influence of firm related and macro-economic factors on profit ability of private insurance company in Ethiopia, covering the period from 2005 to 2015. The research employed a non-probability judgmental sampling design involving 8 insurance firms and utilized an econometric analysis based on multiple regressions with a fixed effects approach to panel data. The analysis included various firm-specific and macroeconomic variables, such as underwriting risk, reinsurance dependence, premium growth, comp. size, solvency ratio, and macroeconomic indicators like GDP growth, inflation, and interest rates. The findings indicated that firm related factors significantly influenced the profit ability of private insurers, with underwriting risk having a negative

effect, while company size and premium growth positively impacted profitability. Conversely, the solvency ratio negatively affected profitability, and reinsurance dependency showed no significant influence, with inflation also deemed an insignificant variable. It suggested that private insurance firm should mitigate effects of underwriting risk and enhance asset base.

Milos (2018) studied the factor of profitability in non-life insurance firm in Serbia, focusing on factors such as asset size, asset growth, liquidity, premium growth, debt ratio, underwriting risk, and operating costs. The research examined the impact of financial leverage on the total revenue and profit ability of these firm, employing cor-elation and regression models for analysis. The results revealed that neither the size of the company nor its growth had significant statistical effect on the profitability of non-life insurance firms in Serbia. Additionally, capital structure of these insurance companies had shifted towards increased reliance on borrowed capital, which make financial challenges of several firms in the sector.

Ozen (2019) performed study examining factor influencing the profit ability of insurance firm in Turkey through a panel data approach. The main objective of the study is to identify most significant firm related and macro-economic variables impacting the profit ability of firm in Turkey, with a focus on the distinctions between the life and non-life sectors. The analysis encompassed the years 2006 to 2017 and included 16 life insurance companies. The findings indicated that R0A, R0E, premium growth, interest rate, GDP growth, and pension activities positively influenced profitability, whereas expense ratios and liquidity had a detrimental effect. For the non-life insurance sector, the research analyze data from 21 companies over the same period. ROA served as the profitability measure. The results derived from the fixed effects panel data model revealed that size, liquidity, age, investment yield, GDP growth, and interest rate positively affected profitability, while premium loss ratio, growth rate, leverage ratio, and solvency ratio negatively impacted it.

Hasibuan (2020) investigated the influence of operational ratio, claim ratio, and retention ratio on profit ability result for insurance listed on the Indonesia Stock Exchange. Study focused from 2011 - 2018 and included a 9 sample firm. The research employed secondary data and utilized regression analysis techniques, facilitated by SPSS software, for testing hypotheses. The results indicated that both the claim ratio and operational expenses ratio had a negative and significant effect on profitability, while the retention ratio exhibited a positive but not significant effect. Collectively, the claim ratio,

operational expenses ratio, and retention ratio significantly influenced the profitability of the companies studied.

Table2*Review of international studies*

Author	Duration	Dep.Vari.	Indep.Vari.	Model	Result
Malik,2011	Pakistan,2005-2009	ROA	Com. Size, age, VOC, Lev.	Reg	Positive: Com. Size, VOC. Negative: Lev.
Burca and Batrinca, 2012		ROA	Com. Size, Return Risk, solvency margin, Financial leverage, Growth of premium, underwriting risk,	Positive: Com.Size	Positive: Com. Size, Risk solvency, Negative: Financial leverage, Growth of premium, underwriting risk.
Jibran,2015	Pakistan	ROA, ROE	Liq., Claim Ratio, Premium Growth, F.A, Com. Size	Positive: Com. Size	Positive: Com. Size
Kaya,2015	Turkey	Nonlife Technical prof. ratio, Sales Prof. Ratio	Size, current ratio, premium growth	Fixed effects	Positive: Size, premium growth. Negative: current ratio.
Daare,2016	India,2006-2016	ROA	Com.size, Liq Inflation, Age, Premium growth rate, GDP.	Reg	Positive: Liq., GDP, Age Negative: Com. Size, Inflation, Premium Growth.

Lire, 2016	Ethiopia,2005-2015	ROA	Underwriting Risk, Com. size, Premium growth, Inflation ,GDP, Interest Rate, Solvency ratio, Reinsurance dependency	Panel Data	Positive: Com Size, Premium Growth, GDP. Negative: Underwriting Risk, Inflation, Solvency. Insigni: Reinsurance dependency
Kazimierz, 2016	Poland,2006-2013	ROA	Com. Size, under writing, net operating expenses	Reg	Positive: Com. Size. Negative: Net operating expenses, underwriting.
Jibran, 2016	Pakistan	ROA,ROE	Com.size, LIQ,G.R, Inflation, GDP	Reg	Positive: Com.Size, Liq, G.R. Negative: GDP and Inflation.
Ozen,2019	Turkey,2006-2017	ROA,ROE	G R, Age, GDP ,Interest, Pension, LIQ, Leverage, Expenses ratio	Panel data	Positive: GR, Age, GDP, Interest, Pension. Negative: Liq, Leverage, Expenses.
Hasibuan, 2020	Indonesia,2011-2018	ROA	Claim Ratio, Operating Expenses, Retentation Ratio	Reg	Positive: Retentaion Ratio. Negative: Claim Ratio, Operating Expenses.

2.2.2 Review of Nepalese articles

Ghimire (2016) conducted an examination of the financial efficiency within the nonlife insurance sector, focusing on 16 private non-life insurance firm through application of financial ratios. Study utilized secondary source of data sourced from yearly reports of Nepal Insurance Authority covering the years 2007 to 2011. The findings indicated that the majority of insurers complied with legal requirements, while certain ratios, including the expense ratio, R.0.A, R0E, gross premium to equity, retention ratio, net premium to equity and showed improvement during the study period. Conversely, other ratios such as the investment ratio, investment to total ratio, and capital to liability ratio remained unchanged, with profit ratios experiencing a slight decline. The research highlighted the necessity for regulatory bodies to assess the determinants influencing the non-life insurance industry in our nation.

Lamichane (2016) checked impact of premium collection on the profit ability of Sagarmatha Insurance Company Ltd, employing ratio analysis as the primary method. The examination was on secondary source of data basis and various financial tool. The study concluded that while gross premium collected and net value of profit exhibited an upward trend, net profit itself was on a declining trajectory. It was noted that significant efforts are being made to measure performance and profitability within the realm of corporate finance. Numerous studies have been conducted on both external and internal factor impacting the result and profitability of insurance comp., utilizing panel data across multiple countries. The research concluded that specific factors related to each insurance company significantly influence overall performance. An article titled Knowing the performance of leading non-life insurance of Nepal published by ShikharInsurance Company Limited on August 6, 2020, in the newspaper Share Sansar, further supports these findings.

Bhattrai (2020) conducted an examination for the Factors affecting profitability of insurance firm in Nepal. This research utilized data from 10 company covering the period 2012 - 2018, resulting in a total of 50 observations. The analysis was performed using SPSS 25 software. The findings indicated that financial ratio and company size are significant factor of profitability within the Nepalese insurance sector.

2.2.3 National related previous studies

Over the years, numerous studies have been conducted on the profit & performance analysis of A class bank in Nepal, however, there has been a notable lack of research on the factors determining profitability in the insurance sector. Thus, these research studies operate in the following manner:

Rijal (2005) conducted an empirical study comparing the profit ability of insurance firms. Two life insurance company were selected as sample for research, and their profitability and other factors influencing profitability were analyzed through ratio analysis using 5 yr of secondary source of data for 2000 - 2005. The main goals of this research were to examine financial ability of Nepal life NLIC and LICN(life insurance corporation). The study outline the following outcomes:

R0A and R0E have been in growing fashion, there have been effective correlation among internet income and overall belongings, profits belongings and hobby profits respectively; similarly, there have been excessive diploma of effective correlation among internet income and managerial charges and lifestyles coverage fund.

i. To compare and examine the steadiness of profitability of the companies.

ii. To have a look at the fashion of profitability of the companies.

iii. To compare and have a look at the relationship of various factor like belongings, interests profits, expenses and insurance fund on profit.

iv. To offer advice for control in enhancing their sports to boom profit on the premise findings and have a look at.

Following finding were found

i. R0A ratio, R0E ratio, return on equity ratio and net profit to life insurance fund ratio of both the companies found to be growing. NLIC has high rate than LIC among ratios.

ii. Perfect positive co-relation among profit and assets, earning assets and interest income respectively. Also, there is positive co-relation among net profit and admin expenses and life insurance fund.

Prajapati (2018) used regression model to investigate the effect of firm specific determinant on the profitability of life insurance in Nepal from 2009 - 2017. He selected size, capitalization, liquidity, Fixed assets and premium growth rate as explanatory variables and used R0A and R0E as dependent variables. Thus, internal related factors were major in determining profitability the insurance sector. The questions are as below:

i. To know the conditions of company particular productivity determinants of life insurance companies in Nepal?

ii. To know relation amomg firm particular factor like comp.size, volume of capital, liquidity, settled resources and development rate with productivity?

iii. To distinguish the firm particular determinant influence most benefit i.e. profitability?

The major discoveries were as takes after:

i. The investigation uncovered that the company particular determinants such as measure, liquidity, volume of capital, settled resources and development of premium are major determinants of benefit. They were positive affect on benefit of life insurance companies in Nepal.

ii. The examination uncovered that there were negative relationship between ROA and capital estimate, liquidity, development rate and positive connection between ROA and volume of capital and settled resources. There were positive connection between ROE and settled resources. There were negative connection between ROE and company measure, volume of capital, and development of company.

iii. The settled resource was major components influencing the benefit of Nepalese life insurance companies. The result uncovers that settled resources that were positive affect on ROA and ROE. This shows that increment settled leads to extend in ROA and ROE.

Table 3 ***Review of national studies***

Author	Period	Dep. Var.	Indep. Var.	Model	Results
Ghimire,2016	2007-2011	ROA, ROE	Expenses ratio, Retention ratio, Gross Premium, Investment ratio, combine ratio	Ratio Analysis	Improving financial efficiency
Prajapati,2018	2012-2017	ROA, ROE	Com. Size, LIQ, VOC, F.A, G.R	Reg	Positive: VOC, F.A (ROA) F.A (ROE) Negative: COM. Size, LIQ, G.R (ROA) COM. Size,

					VOC, G.R (ROE)
Bhattrai,2020	2012-2018	ROE	Expense ratio, Financial leverage, com, Size	Reg	Positive: Expenses Ratio, Financial leverage, Com. Size.

2.3 ResearchGap

There was found various investigate ponders on affect of diverse firm particular, miniaturized scale and macro-economic factors on execution of firms in numerous country over diverse situation and time. Whereas within the setting of our nation, few thinks about was carried on the variables influencing the execution of Nepalese nonlife industry. But there's a crevice of such thinks about particularly in Nepalese non-life insurance companies and consequently the require for this consider is required. From the audit of different literary works, it has not vitally taken on the issues of non-life insurance industry and exceptionally few theses found on the issue of the non-life industry. So that it's critical to investigate and resolve perspective of the given subject things.

This investigate ponder has been centered on non-life insurance companies' ranches particular variables has affect on by and large execution of non-life insurance businesses of Nepal.

Sector gap: Non-life insurance industry.

Sample gap: There were chosen from four nonlife insurance companies.

Variables gap: Firm particular components like Com size, liquidity, settled resources and premium development, volume of capital were taken into thought.

Year of observation: Ten years observe from 20013/14-2022/23.

CHAPTER-III
RESEARCH METHODOLOGY

This chapter clarifies strategy utilized in this ponder. This has been separated into eight areas. To begin with area gives a portrayal of the consider plan utilized within the think about. The area two bargains with population and test in conjunction among choice of firm for reason of ponder. The five segment bargains with information handling strategy. Additionally, area six is information investigation devices and strategies. It explain about strategy. It'll center on problem such as: investigate plan, source and nature of data, determination of firm, and information examination strategies. This area verbalizes the investigate technique utilized within the think about as well as the common inquire about cutline. As such, the segment talks about the investigate rebellious, information collection methods and information examination strategies. The eight areas incorporate the conceptual outline work of the think about.

3.1 Research design

The investigate plan received in this consider comprises of graphic inquire about plan to bargains with the issues related with components influencing benefit of nonlife insurance companies in Nepal. The expressive inquire about plan has been embraced for truth discoveries and inquire about satisfactory data around components influencing productivity of nonlife insurance companies in Nepal. Expressive investigate plan has been utilized to examine the normal characterizes is almost the firm inside components of benefit and their productivity pointers like ROA and ROE. This think about has moreover received expository inquire about to set up the bearings, sizes and relationship between figure influencing and firm benefit. In this manner, it makes a difference in analyzing the cause and impact connection among the distinctive variables used in this consider. The fundamental reason of utilizing causal comparative inquire about plan in this ponder is to get it and look at the affect of determinants of productivity. In this inquire about, R0A and R0E are considered like subordinate variable and company measure, volume of capital, liquidity, settled resources and development rate of premium are free factors. Relapse looks for to appear the connection and degree of impacting of determinants and its productivity.

3.2Nature and sources for data

Objective is to investigate particular components influencing the productivity on nonlife insurance of our nation. The investigate was based upon amounts in nature, which has been analyzing by in quantitative term, and numerical frame. The information has been collecting from auxiliary sources. The auxiliary information sources have been collecting from yearly report, plan, daily paper, diary, articles, web, and site of administrative body of non-life insurance company.

3.3 Population and sample

In arrange to look at the variables influencing productivity of nonlife insurance companies in Nepal, the population for the study are 14 companies of Nepal. The test chosen from 4 of total population, respective data collected for 10 year.

Table 4 ***Sample of the study***

Name Of non-life insurance	**Year of observation**
Neco Insurance Company Ltd. (NECO)	10 year
Nepal Insurance Company Ltd. (NICL)	10 year
Prabhu Insurance Company Ltd. (PICL)	10 year
Shikhar Insurance Company Ltd. (SICL)	10 year

3.4 Sampling method

The examining strategy was non-probability examining. Among population non merged nonlife insurance company with highest paid up capital was selected for sample.

3.5 Data collection procedure

Study has been conducted using secondary sources. Source of data collection are annual report, financial statement of sample non-life insurance companies and 10 year.

3.6 Data analysis tools

This portion bargains with measurable show which is utilized for the reason of examination of auxiliary information. The information are analyzed by utilizing Measurable Bundle for Social science (SPSS 27). The strategies utilized in examination are graphic, co-relation and relapse examination. The clear measurements such as cruel, standard deviations, least and most extreme value of the factors are utilized to depict the character sample insurance amid the duration of 2013/14 to 2022/23. Relationship investigation is utilized to survey the heading of relationship between the subordinate and

free factors. At the side this, relapse examination will look at the impact of autonomous variable on subordinate variable exclusively and combined with other factors. The consider analyzes the relation among company particular factors and company benefit of non life insurance of our nation.

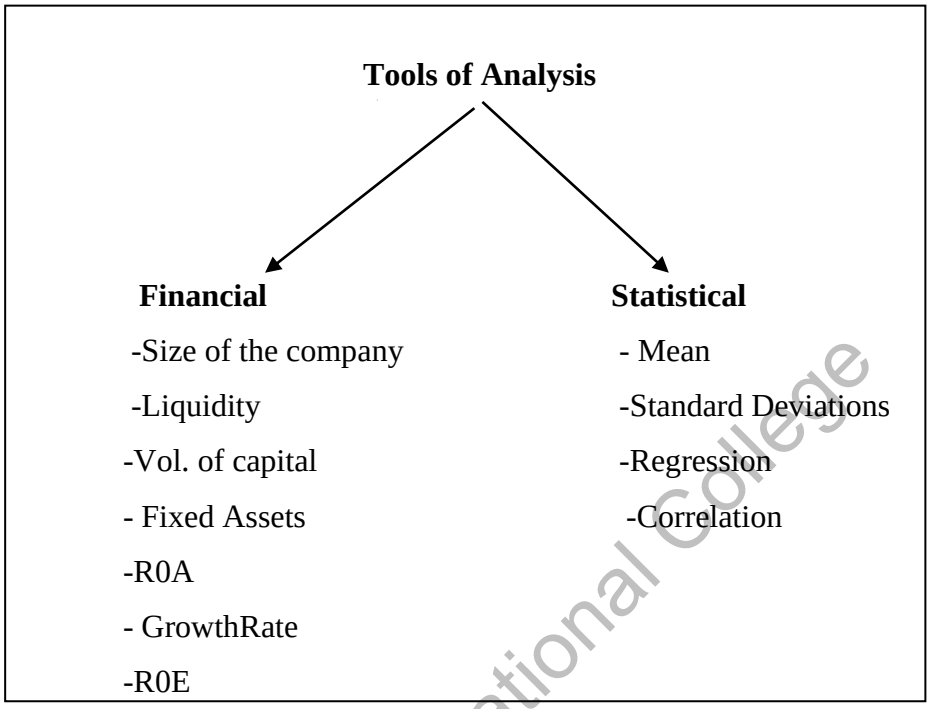


Figure 3: Tools of analysis

3.6.1 Financial tools

Within the inquire about distinctive money related instruments such as proportion, ROA, ROE, Company estimate, liquidity, and volume of capital, settled resources and premium development rate have been utilized.

Proportion investigation is critical instruments for exploring monetary execution. Numerous different groups of individuals are fascinated by exploring the budgetary data to show the working and monetary proficiency and development. These individuals utilize proportion to decide those budgetary character of company in which they are interested. “In the budgetary examination, proportion examination is utilized for assessing the money related situation and execution in the firm.” (Pandey; 1993; 104)

Detail investigation pay, proficiency related proportions will made in arrange to discover out the genuine productivity of the test banks. Productivity examination will be deficient in the event that these over angles are not taken into thought.

1) Profitability (dependent variable)

It degree the in general money related execution and condition which is communicated in premium net wage benefit from endorsing exercises, yearly turnover return on resource and return on value. In this consider the by and large monetary execution such as ROA and ROE is the estimation of nonlife insurance budgetary execution pointers of subordinate factors. They are:

a. Return on total assets

Return on add up to resources proportion is the rate of net benefit on add up to resources. In the context of non-life insurance business proceed from underwriting process are the income. The higher ROA is preferable for the firm. It is obtained as below.

$$\text{Return on assetsR0A} = \frac{\text{NetIncome}}{\text{TotalAssets}}$$

b. Return on equity

R0E is the rate of net benefit on add up to value of firm. Net profit generating from proceed from underwriting process. The higher ROE is preferable for firm. It is given by

$$\text{Return on equity} = \frac{\text{Net Income}}{\text{TotalEquity}}$$

2) Ratio of determinant factors (independent variable)

a. The company size

The company measure decided by numerous variable like no of representative, number of branch, add up to resources. Firm measure is anticipated to advance economies scale and decrease the fetched of gathering and handling data. Execution is likely to extend in measure, since bigger firms will have way better chance broadening, more financial advantage, and in general superior taken a toll proficiency (Boyd and Levine 2001). In this ponder, add up to resource is utilized for Company Measure. Estimate of the nonlife insurance company which is measured in terms of normal log of add up to resources. A bigger company can pick up competitive benefits through effective offices additionally decrease hazard through more noteworthy portfolio expansion. It can be calculate as

Company Size = Total Assets value of Log

b. Liquidity

Liquidity in a non-life insurance company is essentially the ability of guarantees to cover immediate liabilities, such as operational expenses or compensation in the event of damage. Cash flow from net premiums, investment returns, and asset liquidation are vital sources of liquidity for contingency plans (Chen and Wong, 2004). Liquidity is calculated by partitioning current resources by current obligation. Companies with more noteworthy liquidity are less likely to come up short since cash can be effortlessly realize in exceptionally troublesome circumstances. It is hence anticipated that life insurance companies with more fluid resources will outflank those with less fluid resources. Agreeing to the hypothesis of organization costs, more noteworthy liquidity can increment office costs of firms as directors might take benefits of fluid resources (Adams and Buckle, 2000). It can be calculate as

$$\text{Liquidity} = \frac{\boldsymbol{Current\ Assets}}{\boldsymbol{Current\ Liabilities}}$$

c. Volume of capital

Capital level of any firm is appeared throug bookkeeping condition i.e. add up to resources - add up to liabilities. In thinks about related to components influencing the productivity of nonlife companies, the volume of capital is calculated by proportion of shareholder value to add up to resources, it can be communicated by the carrying sum of capital. These thinks about have appeared that there's a factually critical positive connection between the volumes of capital of nonlife firm with their benefit, communicated by ROA (Al-Shami,2013 and Malik,2011).It can be calculated as

$$\text{Volume of capital} = \frac{\boldsymbol{Total\ Equity}}{\boldsymbol{Total\ Assets}}$$

d. Fixed assets

Settled resources calculate by the proportion between settled resources to add up to resources. Different considers appear the affect of settled resources within the productivity of nonlife companies as conflicting. Malik, (2011) in his ponder the components influencing the productivity of nonlife companies in Pakistan in 2011 appears measurably critical relationship between settled resources and productivity of nonlife companies. He contends that more noteworthy the weight of settled resources in add up to resources, benefit will be indeed more noteworthy. Yuqi Li (2007) conducted think about within the UK appears that there's no critical factual relationship between settled resources and productivity of nonlife companies.

$$\text{Fixed assets} = \frac{\boldsymbol{Fixed\ Assets}}{\boldsymbol{Total\ Assets}}$$

e. Premium Growth rate of firm

Growth rates for firm are communicated through the alter in rate of add up to resources of the company from one year to other year. In specific, for nonlife company development rate is the rate alter within the add up to sums of concurred premiums. And the company continuously has got to increment its assets for way better execution, and subsequently to be more productive. In any case, the relation among the growth of firm with its productivity may not be positive, because it is anticipated to be, since in a few cases, high rise in commerce may uncover an nonlife company to higher hazard which leads to extend its specialized saves commanded by laws (Burca & Batrinca, 2014). It is as

$$\text{Growth rate} = \frac{\boldsymbol{Current\ premium - Previou\ premium}}{\boldsymbol{previous\ premium}}$$

3.6.2 Statistical Tool

These are the methods or tools used to examine the data gathered from different sources. In the field of statistics, there are numerous statistical tools available for analyzing data of different types. This study employs the tools as below for data analysis.

a. Arithmetic mean

AM normal could be a esteem from a gather of information to speak in such way, a esteem, which was assumed to characterize for entire bunch (Gupta:1990; E7-2). There are different sorts of midpoints. Number juggling cruel (A.M. straightforward and weighted), middle, mode, geometric cruel, consonant cruel, are the major sorts of averages. The commonly utilized degree speaking to the whole information by one esteem is AM. Esteem of AM. is gotten including all things and isolating add up to by different things or perceptions.

Numerically, (Gupta,1992: 238)

$$\text{Arithmetic mean A.M.,}\ \bar{X} = \frac{\sum X}{n}$$

$\bar{X}$ = ArithmeticMean

$\sum X$ = Sumvalue of variable X.

n = observation number

b. Standard DeviationSD

It examines outright scattering. High Std. deviation, higher the greatness of values deviation from cruel.

Numerically, (Gupta; 1992:380)

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

c. Correlation analysis

Co-relation examines relation between 2 variables. The correlation coefficient is summarized as a number and indicates degree, extent to which 2 variables related to each other, but says nothing about effect. (Bajracharya, 2053) Karl Parson's co-relation coeff.(r) use to analyze the relation with 2 variable. Co-relation analysis mention the negative and positive relation between variable. It identify whether the following exist:

1. There is negative or positive relation.

2. Define whether the relationship is significant or in-significant and if so, what is the cause and effect of the relationship. Correlation analysis is performed to determine the relation between variable (whether the relation is in-significant or significant).

While making decision, the result will be based as below: If r=1, it show perfect positive co-relation.

If r=-1, it show perfect negative co-relation.

If r=0, it show there is no co-relation.

If "r" is within -0.7 and 0.999, there is a highly positive (or negative) co-relation.

If "r" is between 0.5 and 0.699, there is a moderate level of co-relation.

If "r" is less than 0.5, there is a low co-relation.

3.7 Models

Regression model

To examine the relation between company related variables and firm profitability general insurance companies, above study used estimated regression model.

Profitability of general insurance firm depends on firm specific factors. Regression model used in this study to examine the impact of profitability determination is

Regression model 1:

Π= α + Lnβ0SIZE + β1LIQ. + β2VOC + β3FA + β4GR + ε

In the above regression model, R0At is he dependent variable, expressed as the percentage of profit to total assets. The effect of firm size, amount of capital, liquidity and growth rate on return on capital is tested.

Where,

Π: Profit of Non-life Insurance (Dependent Variable)In this paper, we use ROA (return on assets) to measure profitability.

α: constant

Lnβ0 Size : Company size is calculated by total log value of assets

β1LIQ: It is proxies the current assets divided by current liabilities

β2VOC: Vol.of capital defined as equity to total assets.

β3FA: Fixed assets is fixed assets to total assets.

β4GR: Growth as change in premium of the nonlife insurance company.

e: Error terms.

B0 is the constant and β5, β4, β3, β2, β1 are the coeff. of variables.

Regressionmodel 2:

Π= α + Lnβ0SIZE + β1LIQ. + β2Voc + β3FA + β4GR + ε

This model, ROE, dependent variable is given by net income divided by equity. The comp. size, vol. of capital, fixed assets, liquidity and premium growth rate on R0A is checked.

Where,

Π: profitability in nonlife insurance companies (dependent variable) in this study return on equity(net profit to equity) calculates profitability.

α: constant.

Lnβ0 Size: Company size is calculated by log value of total assets.

B1LIQ. : Liquidity is the Current assets divided by Current liabilities

β2VOC: It is equity to total assets

β3FA: It is given by the fixed assets divided by total assets

β4GR: Growth rate is change in premium of the nonlife insurance company.

e: Error terms.

β0 is the constant and β1, β2, β3, β4, β5 are the coeff. of variables.

Table 5 ***Descriptions of variables***

S.No.	Variable Items	Particulars	Measured	Expected Relation with Profitability
A	SIZE	Comp.Size	Log of assets total value	-
B	LIQ..	Liquidity	Current assets to Current liabilities	-
C	V.O.C	Volumeofcapital	Equity to asset in total	+
D	F.A.	Fixed assets	Total fixedassets to total assets	+
E	G.R.	PremiumGrowth rate	change in premium collection	+
F	R.O.A.	Return on total assets	Net value of profit to assets in total	
G	R.O.E.	Return ontotal equity	Net profit to shareholders' equity	

CHAPTER-IV
RESULTS AND DISCUSSION

This chapter smoothly delivers a methodical exploration, explanation, and assessment of secondary data concerning diverse themes connected to examining the correlation between company-relates aspects and the performance of non-life insurance firms.The basic process of the analysis is to identify the problem, determine the appropriate data, select the appropriate method to answer the question, apply the method, and evaluate, summarize and report the results. For this purpose, various statistical tools are defined. These are discussed in Chapter 3. A comprehensive review of non-life insurance firms was conducted to gain a thorough understanding of the non-life insurance sector. Initially, an analysis of the variables in the study is conducted, followed by the presentation of descriptive statistics. Ratio and regression is used to demonstrate the connection between the dependent and independent variables. Ultimately, the outcomes of the regression model illustrate the impact of the independent variables on the dependent variable. This section wraps up the chapter by offering a summarization of the findings derived from the secondary data.

4.1 Data analysis of variables of the study

4.1.1 Company size

It represent total assets and measured by the log value of total assets.

Table 6 ***Size of selected nonlife insurance companies (in millions Rs.)***

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	869.50	1337.34	1378.06	782.80	1091.93	309.37
2014/2015	1119.32	1600.76	1863.35	1002.88	1396.57	404.74
2015/2016	1239.85	1619.53	2662.12	1328.79	1712.57	653.47
2016/2017	1674.50	1574.76	3439.37	2350.21	2259.71	858.57
2017/2018	2464.68	3233.58	5325.47	3284.05	3576.95	1224.49
2018/2019	2950.92	4273.47	5677.92	3856.55	4189.71	1135.40
2019/2020	3532.85	4739.82	8098.29	5047.46	5354.61	1942.41
2020/2021	4302.51	4796.94	9506.67	7141.56	6436.92	2392.01
2021/2022	4470.99	5199.83	11264.33	8354.13	7322.32	3121.92
2022/2023	4896.66	5349.69	11043.56	8321.50	7402.85	2863.28
Mean	2752.18	3372.57	6025.91	4146.99		
Std. Dev	1503.61	1685.35	3750.18	2945.95		

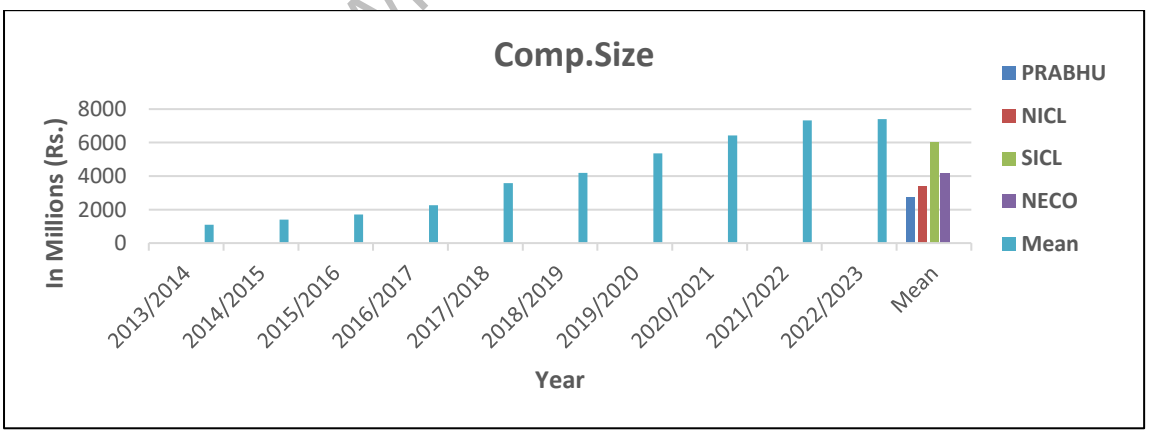
Source: Appendix 1

Table 6 shows the size of the four general insurance companies over 10 financial years along with the mean and std. deviation. Above sample general insurance firms SICL has high avg. comp size Rs.6025.91million, PRABHU with low of Rs.2752.18 million for 2013 to 2022. NICL size of Rs. 3372.57 million and NECO has Rs. 4146.99 million on average. This indicates that SICL possesses the highest average assets and is in a stronger position compared to the other chosen insurance companies as indicated by the logarithm of total assets.

Above data indicates comp.size differ with in individual nonlife insurance firm. Com.size of NICL is growing fromRs. 1337.34 million in 2013/14 to Rs. 5349.69 million in 2022/23, get down in 2016/17 of research paper. PRABHU is in increasing trend as size growing from Rs. 782.80 million in 2013/14 to Rs. 2752.18 million in 2022/23.

Likewise, SICL is in also increasing trend from Rs. 1378.06 millions to Rs. 11043.56 millions which is highest average value of company size in year 2022/23. Likewise NECO has also increasing trend of total value of assets from Rs.783.88 millions to Rs.8321.50 millions in year 2013/14 to 2022/23 but slight decrease in year 2022/23. The difference in comp.size of nonlife insurance firm as given by Std. deviation of PRABHU, NICL, SICL and NECO are Rs. 1503.61 million, Rs. 1685.35 million, Rs, 3750.18 and Rs. 2945.95 million. Among which, SICL has greater variation and PRABHU with lower.

Figure 4: Com*Size of sample nonlife insurance firm(in million Rs.)*



Source: Apppendix1

Figure 4 shows average comp size trend for 10 year. Comp.size on average is growing in 2013/14 to 2022/23. The high average comp.size in 2022/23 and low in 2013/14. It shows that the overall company size is satisfactory.

4.1.2Liquidity

It is a ratio which indicates an insurance firm capability to pay short- term liabilities, which are equivalent to operating expenses and compensation in losses. It is calculated as current assets divided by current liabilities, usually averaged for the year. Table 7 shows the liability structure of major non-life insurance companies.

Table 7 ***Liq. of selected nonlife insurance companies***

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	1.44	1.30	1.28	0.54	1.14	0.41
2014/2015	1.52	1.11	1.30	0.71	1.16	0.34
2015/2016	1.85	1.17	1.77	0.66	1.36	0.56
2016/2017	2.41	1.29	1.73	0.45	1.47	0.82
2017/2018	1.22	0.73	0.72	0.46	0.78	0.32
2018/2019	1.42	0.86	0.69	0.43	0.85	0.42
2019/2020	1.43	0.82	0.90	0.57	0.93	0.36
2020/2021	1.38	0.87	0.98	0.72	0.99	0.28
2021/2022	1.39	0.61	0.96	0.67	0.91	0.36
2022/2023	1.25	0.64	0.96	0.65	0.88	0.29
Mean	1.53	0.94	1.13	0.59		
Std. Dev	0.35	0.26	0.38	0.11		

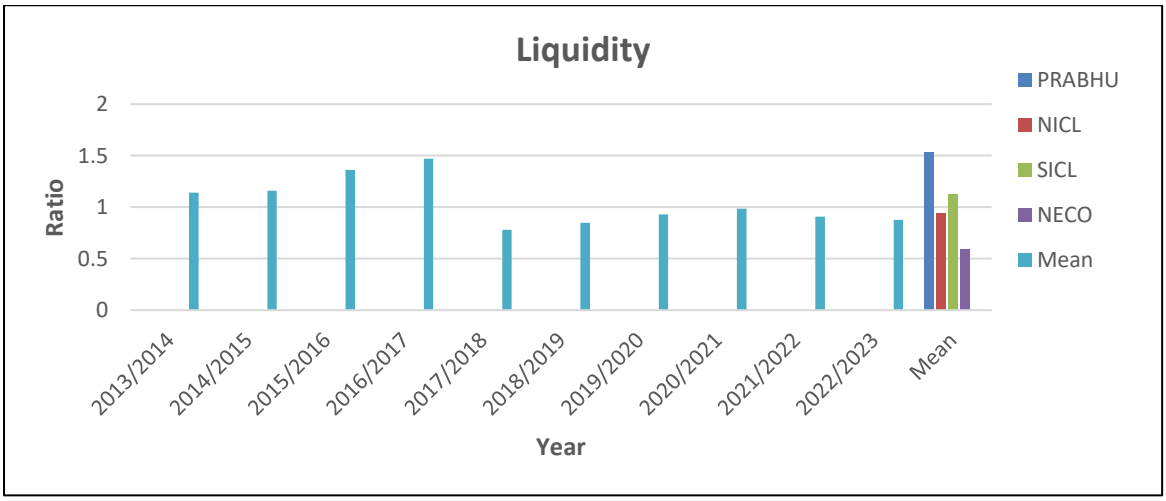
Source: Appendix 1

Table 7 shows the liquidity of selected insurance firm for the 10 years with SD & average. PRABHU has greater average liquidity ratio 1.53 and NECO have lower 0.59 for period of 2013 to 2022. NICL has liquidity ratio of 0.94 and SICL has 1.13 liquidity ratios on average. This shows PRABHU has greater capacity to pay for compensation than other firm.

Table 7 also reveals the trend fluctuating for liquidity ratio and lower than average standard. NICL liquidity ratio has increased from 1.30 to 0.64 in year 2013/14 to 2022/23. SICL has liquidity ratio of 1.28 in 2013/14 and increased from 1.28 to 1.73 up to year 2016/17 to 2016/17 then in year 2017/18 It decreased to 0.72 and increased to 0.96 times up to 2022/23. The liquidity ratio of NECO grown from 0.41 in year 2013/14 to 0.82 in year 2016/17, and then it has decreased up to 0.29 in the year 2022/23.

PRABHU has liquidity ratio of 1.44 in year 2013/14 and increased to 2.41 in year 2016/17 but decreased from the year of 2017/18 to 1.22 and 1.25 up to 2022/23. This means the ability of paying compensation is increasing. Also, change in above insurance liquidity is given by std. deviation of PRABHU, NICL, SICL and NECO are 0.35, 0.26, 0.38 and 0.11. In above, SICL has higher and NECO has lower variation.

Figure 5: ***Avg liq of selected nonlife insurance companies***



Source: Appendix1

Figure 5 shows trend of average liquidity computed for study duration. The trend is fluctuating for study period 2013/14 to 2022/23 as per the figure. The average liquidity ratio of nonlife insurance companies grown in the year 2013/14 and then growing till year in year 2016/17. After then it again decreasing till 2022/23. The greater liquidity ratio is in 2016/17 and lower is in 2017/18. Increasing trend indicates the payment of compensation grown whereas decreasing trend shows less payment of compensation.

4.1.3 Volume of capital

VOC is the equity capital divided by firms assets in total for the year, and is usually the average for insurance firm. The capital size is typically indicated by the ratio of equity capital to total assets, though for non-life insurance firm, it may also be shown as the book value of capital.

Table 8 ***Vol. of capital of selected nonlife insurance companies***

Yr	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	43.85%	33.90%	42.55%	44.05%	41.09%	4.84%
2014/2015	51.04%	29.94%	42.89%	49.55%	43.36%	9.62%
2015/2016	57.93%	31.46%	53.49%	46.29%	47.29%	11.59%
2016/2017	66.20%	37.03%	51.54%	52.28%	51.76%	11.91%
2017/2018	59.01%	33.69%	42.86%	55.63%	47.80%	11.70%
2018/2019	62.67%	40.08%	47.73%	56.85%	51.83%	9.96%
2019/2020	55.91%	41.36%	41.03%	50.76%	47.27%	7.32%
2020/2021	51.14%	46.81%	40.43%	43.11%	45.37%	4.65%

2021/2022	53.25%	48.12%	41.69%	43.61%	46.67%	5.15%
2022/2023	54.27%	54.22%	44.25%	52.99%	51.43%	4.83%
Mean	55.53%	39.66%	44.85%	49.51%		
Std. Dev	6.37%	7.99%	4.54%	5.04%		

Source: Appendix 1

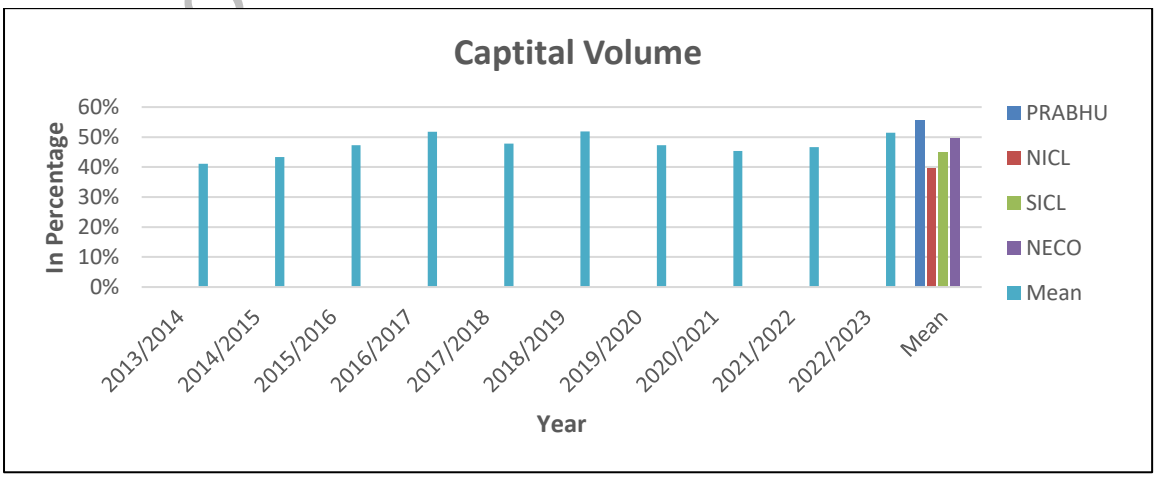
Table 8 reveals the vol. of capital of 4 nonlife insurance for the 10 years with their average and Std. deviation. PRABHU insurance got greater average capital of 55.53 % and NICL has lowest VOC of 39.66%. PRABHU has average VOC of 55.53%.

Table 8 indicates VOC differ within the same company and the trend of VOC is fluctuating. NICL capital increased from 33.90% to 54.22% in year 2013/14 to 2022/23 SICL has increased trend up to year 2013/14 to 2015/2016 from 42.55% to 53.49% and decreased from year 2016/2017 it has fluctuate in nature.

The VOC of NECO is increasing from year 2013/14 to 2018/19 from 44.05% to 56.85% and decreasing from 50.76% to 43.61% in the year 2019/20 to 2021/22 thereafter increase to 52.99%. It means that it has fluctuated in volume of total equity. PRABHU has 43.85% VOC in the year 2013/14 and increasing till the year of 2016/17 to 66.20% and decreased VOC in the year of 2017/18 to 59.01% and it has fluctuated in nature resulting decreasing to 54.27% in 2022/23.

Also, the differentiation in capital of companies as indicated by Std deviation of PRABHU, NICL, SICL and NECO are 6.37, 7.99, 4.54 and 5.04 respectively. Among those, NICL has greater variation and SICL has low variation.

Figure6: ***Vol. of capital for sample nonlife insurance firm***



Source: Appendix1

Figure 6 shows trend of average capital computed for 10 year. The average vol. of capital is increased up to 2016/17 and decreased up to 2020/21 thereafter increasing in latest two year . The highest VOC is in 2016/17 and lowest is in 2020/21. The trend line as a whole indicates that the average VOC of Nepalese nonlife insurance businesses fluctuated during that time. A rising trend indicates the companies' profitability and return on assets.

4.1.4 Fixed assets

One financial ratio that illustrates the company's performance. It is calculated as total fixed assets divided by total assets, often the average value over the course of the year. The fixed asset for chosen nonlife insurance businesses is shown in Table 9.

Tab 9 Fixed assets of nonlife insurance companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	12.20%	2.22%	16.07%	1.65%	8.04%	7.22%
2014/2015	8.96%	1.78%	11.38%	1.57%	5.92%	5.01%
2015/2016	7.90%	1.93%	7.87%	2.19%	4.97%	3.37%
2016/2017	5.66%	1.95%	5.95%	8.48%	5.51%	2.69%
2017/2018	3.88%	1.41%	10.58%	6.63%	5.63%	3.93%
2018/2019	3.17%	1.89%	10.68%	8.13%	5.97%	4.14%
2019/2020	2.58%	1.67%	7.70%	8.19%	5.04%	3.38%
2020/2021	2.07%	1.73%	6.96%	6.25%	4.25%	2.74%
2021/2022	2.57%	1.67%	6.92%	6.43%	4.40%	2.67%
2022/2023	2.36%	2.55%	7.08%	7.14%	4.78%	2.69%
Mean	5.14%	1.88%	9.12%	5.67%		
Std. Dev	3.47%	0.32%	3.08%	2.78%		

Source: Appendix 1

Table 9 reveals the selected four nonlife insurance companies fixed assets for 10 years with average and std. deviation. SICL insurance got greater average fixed assets 9.12% and NICL with lowest 1.88% for 2013/14 to 2022/23. PRABHU has average fixed assets 5.14% and NECO has 5.67% average fixed assets. Given that fixed assets are metric for firms good result, SICL has outperformed other carefully chosen nonlife insurance companies.

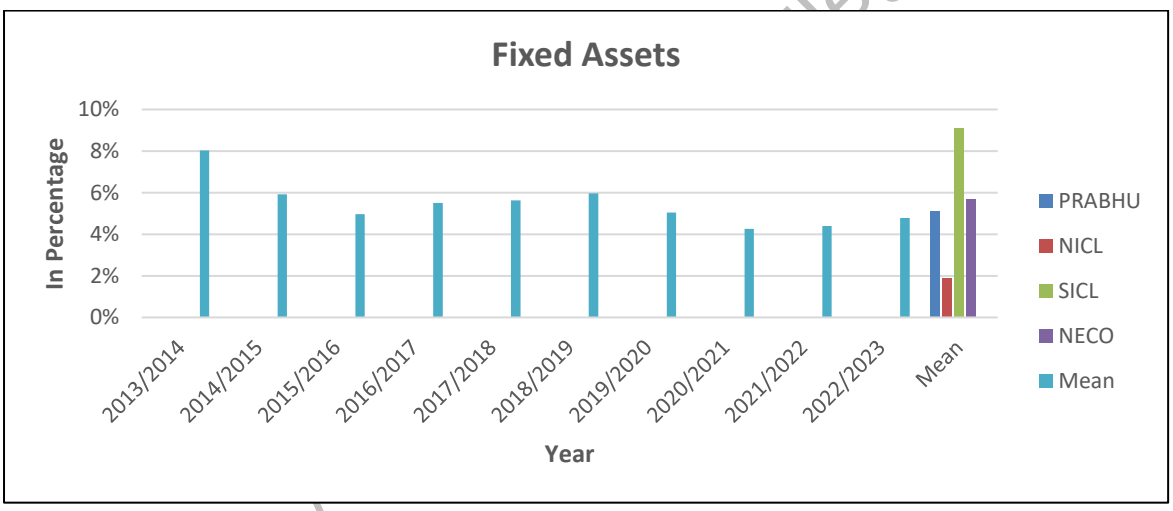
Additionally, Table 9 demonstrates that the trend of fixed assets is highly variable and that fixed assets vary greatly throughout nonlife insurance businesses. PRABHU

insurance got declining trend from 2013/14 to 2022/23 from 12.20% to 2.36%. SICL is in fluctuating trend as fixed assets decreased from 16.07% to 5.95% from 2013/14 to 2016/17 and increased for next two years thereafter decreasing from 2019/20 to 2022/23 from 7.70% to 7.08%. It concludes that it has fluctuation of fixed assets.

The fixed assets of NICL is in decreasing trend from 2.22% to 1.67% from 2013/14 to 2021/22 and increased in last year 2022/23 to 2.55 %. Likewise, NECO is increasing from 2013/14 to 2019/20 from 1.65% to 8.19% and decreased thereafter for two years and increased to 7.14% in 2022/23.

The differentiation in FA of above sample firms as shown by std. deviation of PRABHU, NICL, SICL and NECO is 3.47%, 0.32%, 3.08% and 2.78%. PRABHU insurance has greater variation and NICL has least.

Fig 7: ***Average FA of selected nonlife insurance company***



Source: Appendix1

Figure 7 shows average fixed assets for 10 year. The mean value of FA is decreasing for 2015/16 & increasing till 2018/19. Thereafter decreasing up to 2020/21 and slightly increasing in last two year. The highest average fixed assets is in 2013/14 and lowest is in 2020/21. The trend line suggests that, throughout the observed period, the average fixed assets of non-life insurance companies in Nepal exhibited a variable pattern. A rising trend indicates that the company's performance has improved, whereas a falling trend indicates that performance is neither good nor terrible.

4.1.5Growth rate

It is accounting ratio which indicates a company's insurance premium collections.

Growth rate is the change in premiums over a year, usually averaged over a year. Table 10 shows the growth rate structure of major non-life insurance firm.

Table10*Growth of sample nonlife insurance firms*

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	11.63%	2.66%	34.15%	9.48%	14.48%	13.66%
2014/2015	5.55%	3.71%	43.07%	17.65%	17.50%	18.14%
2015/2016	19.25%	-15.68%	60.48%	70.89%	33.73%	39.78%
2016/2017	-10.18%	-17.04%	37.00%	50.07%	14.96%	33.54%
2017/2018	159.07%	184.24%	135.77%	21.92%	125.25%	71.67%
2018/2019	-11.22%	34.17%	2.94%	15.37%	10.31%	19.26%
2019/2020	42.31%	-0.78%	-3.76%	4.11%	10.47%	21.48%
2020/2021	15.65%	66.82%	13.57%	11.55%	26.89%	26.67%
2021/2022	-4.54%	-22.33%	17.01%	17.68%	1.96%	19.20%
2022/2023	10.85%	3.34%	20.57%	15.82%	12.65%	7.36%
Mean	23.84%	23.91%	36.08%	23.46%		
Std. Dev	50.07%	62.29%	39.98%	20.72%		

Source: Appendix 1

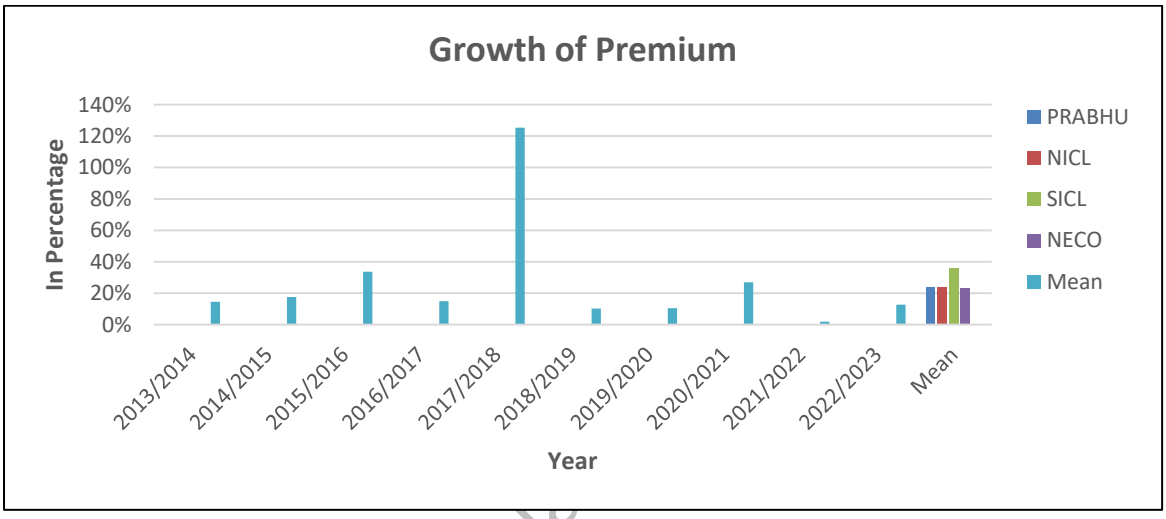
Table 10 4 nonlife insurance company's premium growth for 10 years with their mean and std. deviation. SICL growth rate is 36.08% which is highest and NECO have lowest which is 23.46 % during the period of 2013/24 to 2022/23. NICL has average growth rate 23.91% and PRABHU has 23.84% growth rate. SICL has a good premium collection than other firms of selected sector, because the growing ratio is measured by the variation of the collected premium for the duration of firm. Above data shows the growing rate differs considerably within individual non-life insurance firm and trend of the very fluctuating growth. NICL premium is decreasing in trend up to year 2016/17 that is from 2.66% to -17.04% and then increased to 184.24% in 2017/18. The year on year growth of is fluctuating for NICL.

SICL has increasing trend in 2013/14 to 2017/18 from 34.15% to 135.77% but it decrease for next two year. From 2020/21 SICL premium is start to increase by 13.57% to 20.57% in 2022/23. NECO insurance premium collection is in increasing yearly. In 2013/14 9.48% growth and sharp growth up to 2016/17 i.e. 50.07% premium growth year on year basis. NECO is the only company having growth of premium collection on every year.

However, PRABHU insurance growth is fluctuating increasing for first three year up to 2015/16 and decreased by 10.18% in 2016/17. There is sharp growth in 2017/18 by 159.07% and premium collection is decreased next year. PRABHU insurance premium collection is declined in 2021/22 as well resulting increase in 2022/23.

The differentiation in insurance companies growth rate is given std deviation of PRABHU, NICL, SICL and NECO are 50.07%, 62.29%, 39.98%, and 20.72%. PRABHU got high variation and NECO with low.

Figure 8: ***Avg. growth rate of selected nonlife insurance companies***



Source: Appendix 1

Figure 8 shows trend regarding average growth rate computed for 10 year. The average premium growth rate is increase trend up to 2015/16 trend and decreased in 2016/17. The highest average growing in 2017/18 and lower during 2022/23. Trend line indicates that the average growing scenario of Nepali non-life insurance firm has exhibited fluctuations throughout the observed period. The upward trend reflects an increase in the premium collections of these companies.

4.1.6 Profitability

4.1.6.1Return on assets

The R0A indicates a firm ability to create profit through use of deployed total assets. A higher ROA ratio signifies that the organization's management is more adept at efficiently and effectively utilizing its total assets compared to other firms. The profitability status of non-life insurance firm of our nation is shown and analyzed in the following

Table 11 ***R0A of sample non-life company insurance***

Yr.	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	6.73%	2.10%	9.52%	4.69%	5.76%	3.14%
2014/2015	8.57%	-1.33%	11.79%	9.19%	7.06%	5.76%
2015/2016	12.05%	3.45%	11.52%	9.15%	9.04%	3.93%
2016/2017	9.84%	7.31%	10.47%	8.87%	9.12%	1.37%
2017/2018	9.71%	2.66%	9.28%	8.25%	7.47%	3.27%
2018/2019	8.72%	5.07%	7.53%	9.05%	7.59%	1.80%
2019/2020	7.32%	5.32%	5.05%	9.56%	6.81%	2.09%
2020/2021	5.19%	4.97%	3.28%	7.10%	5.14%	1.56%
2021/2022	4.16%	6.38%	2.43%	6.55%	4.88%	1.96%
2022/2023	4.60%	6.97%	2.05%	8.47%	5.52%	2.81%
Mean	7.69%	4.29%	7.29%	8.09%		
Std. Dev	2.56%	2.64%	3.79%	1.53%		

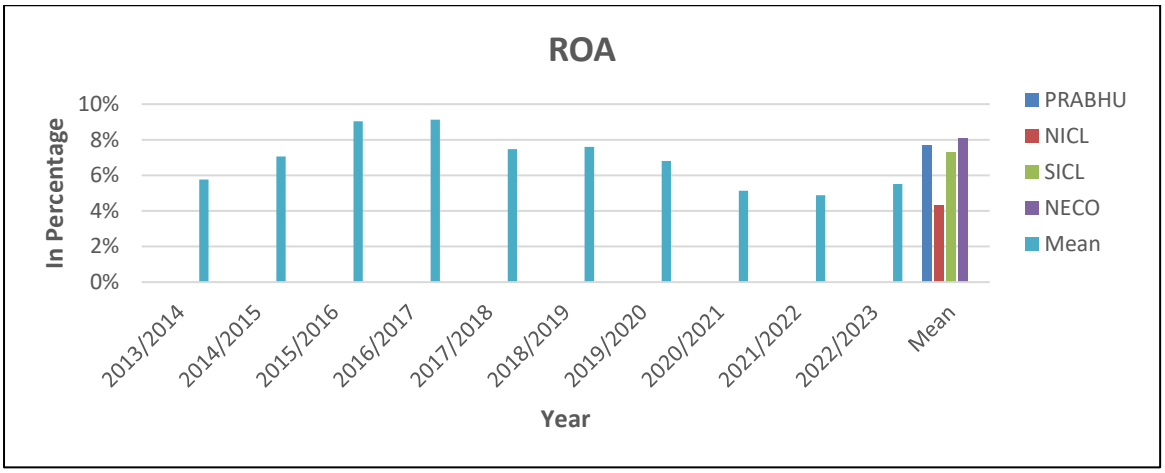
Source: Appendix 1

Table 11 reveals the ROA of 4 companies for the 10 years with mean value and Std. deviation. NECO has highest ROA and NICL has lowest ROA. ROA of NICL is negative in 2014/15 by 1.33% but in other year there is increasing ROA. NICL was capable to generate 4.29% profits out of deployed assets. R0A of SICL was increasing trend from 2013/14 to 2015/16 from 9.52% to 11.52% after then decreasing till 2022/23 which stood at 2.05%.

Likewise, ROA of PRABHU has increased up to 2015/16, decreasing trend up to end 2022/23. ROA of PRABHU is able to yield 7.69% net profit on assets. NECO is in increasing up to 2015/16 and after that it decreases next two year then is starts increasing till research period. Fluctuating trend of ROA was found for the study period.

The differentiation in ROA of above nonlife insurance is given by standard deviation of PRABHU, NICL, SICL and NECO are 2.56%, 2.64%, 3.79%, and 1.59% respectively. SICL has greater and NECO with lower variation which shows SICL is having high risk with R.0.A & NECO has low R.0.A. And SICL was making quite high R.0.A (return on assets).

Figure9: ***Avg. R.O.A Return on asset of selected non-life insurances***



Source: Appendix1

Figure 9 shows return on assets (ROA) of 4 companies (PRABHU, NICL, SICL, and NECO) for 10 years which is inconsistent and growing trend over the period 2013/14 to 2016/17. The higher ROA is in 2016/17 and the lower is in 2021/22.

4.1.6.2 R.O.E (Return on equity)

It indicates effective utilization and management of equity shareholders' funds within the organization, and conversely, it reflects the opposite as well. The current status of ROE among Nepalese nonlife insurance is presented as

Table 12: ***ROE(Return on equity) of sample non-life insurance***

Yr.	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	15.34%	6.19%	22.36%	10.64%	13.63%	6.92%
2014/2015	16.80%	-4.45%	27.48%	18.55%	14.60%	13.53%
2015/2016	20.80%	10.97%	21.53%	19.77%	18.27%	4.92%
2016/2017	14.86%	19.74%	20.31%	16.97%	17.97%	2.53%
2017/2018	16.45%	7.89%	21.66%	14.83%	15.21%	5.68%
2018/2019	13.92%	12.65%	15.78%	15.92%	14.56%	1.57%
2019/2020	13.08%	12.86%	12.32%	18.84%	14.27%	3.06%
2020/2021	10.16%	10.61%	8.12%	16.47%	11.34%	3.59%
2021/2022	7.82%	13.26%	5.82%	15.02%	10.48%	4.37%
2022/2023	8.47%	12.86%	4.63%	15.99%	10.49%	4.98%
Mean	13.77%	10.26%	16.00%	16.30%		
Std. Dev	4.03%	6.30%	7.90%	2.58%		

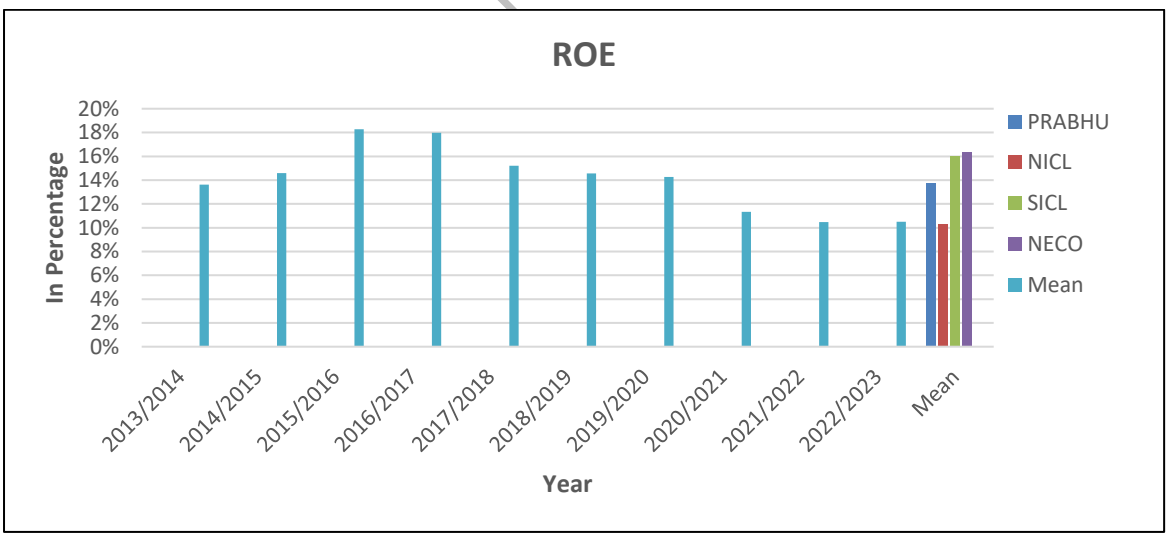
Source: Appendix 1

Table 12 exhibits ROE of 4 non-life companies for the 10 years with mean value and std. deviation. ROE of NECO is highest and NICL is lowest during period.

The ROE of SICL is lowering trend from 22.36% to 4.63% during 2013/14 to 2022/23 except increase to 27.48% in 2014/15. Similarly, the ROE ratio of PRABHU has increased from 2013/14 to 2015/16 and then it is in decreasing trend up to 2022/23 from 20.80% to 8.47%. NICL has negative return in 2014/15 and increased for next two year up to 19.74% in 2016/17. Thereafter ROE is decreased to 7.89% in 2017/18 and increased to 12.65% next year. NICL ROE after 2018/19 to 2022/23 is around 11 to 13 % which is fluctuating in nature. NECO insurance ROE is increased from 10.64% to 19.77% in 2013/14 to 2015/16 and decreasing trend till 2022/23 up to 15.99% except 18.84% rise in 2019/20.

The mean value of all sample nonlife insurance companies PRABHU, NICL, SICL, and NECO are 13.77%, 10.26%, 16% and 16.30% respectively. Among those average ROE of NECO is highest. ROE high shows that company will generate more return. Similarly, standard deviation of PRABHU, NICL, SICL, and NECO are 4.03%, 6.30%, 7.90% and 2.58%. It shows SICL and NICL will able to create more return by taking greater risk.

Figure 10: ***Avg. return on equity of sample nonlife insurance companies***



Source: Appendix1

Figure 10 shows R.O.E.(return on equity) in average 4 nonlife insurance firm (PRABHU, NICL, SICL, and NECO) for the 10 fiscal years. There is increasing for first three year till 2015/16 and decreasing up to 2022/23. ROE is high in 2015/16 and low in 2021/22.

4.2Descriptive statistic

The research utilizes descriptive statistics such as minimum, maximum, mean, and standard deviation for the analyzed variables. Consequently, these statistics facilitate a more meaningful presentation of the data, thereby allowing for easier interpretation. Table 13 displays the statistics for descriptive data of the dependent variable like ROA and ROE as well as for in-dependent variables like com size, vol of capita, fixed assets, liquidity and growth rate for selected sample non life company, covering the year from 2013/14 to 2022/23.

Table 13 ***Descriptive statistics***

Descriptive statistics					
	Observation	**Min.**	**Max.**	**Mean**	**Std. Deviation**
ROA	40	-1.33%	12.05%	6.84%	2.63%
ROE	40	-4.45%	27.48%	14.08%	5.21%
Com. size	40	8.89	10.05	9.50	0.30
Liquidity	40	0.43	2.41	1.05	0.28
VOC	40	29.94%	66.20%	47.39%	5.99%
FA	40	1.41%	16.07%	5.45%	2.41%
Growth	40	-22.33%	184.24%	26.82%	43.26%

Source: Spss descriptive statistics output

Table 13 illustrates that R.O.A. Return on assets serves measure of firm efficiency for utilizing assets to generate earnings prior to the settlement of contractual obligations. The average ROA during the period from 2013/14 to 2022/23 is recorded at 6.84%. Additionally, the standard deviation of ROA is 2.63%, indicating a relatively minor variation in the total assets among selected non life insurance. The ROA values lies from -1.33% to 12.05%.

Analysis of profitability, as indicated by the R.O.E./Return on equity, reveals average profit capability of non-life company(insurance) for 2013/14 - 2022/23 stands at 14.08%. This implies that, on average, the nonlife insurance sector yields 0.19% return to its shareholders. Furthermore, the standard deviation of the ROE is recorded at 5.21%, indicating a low level of variability. The ROE values lies from -4.45% to 27.48%.

Concerning independent variables, comp. size is given by total assets. The average logarithmic value of total assets for company size is 9.50, with a standard deviation of 0.30, indicating a minor deviation. Values for comp. size are 8.89 (minimum) and

10.05(maximum). The average liquidity ratio is 1.05, suggesting that current assets are sufficient to cover short-term liabilities. The standard deviation for liquidity is 0.28, reflecting a low level of variation among nonlife insurance in relation this measurement.

Average data of V.O.C. is recorded at 47.39%. VOC minimum and maximum values are 29.94% and 66.20%. Standard deviation is relatively low at 5.99%.

The overall fixed assets represent an average of 5.45% among the value of total assets of non-life insurance. Std.deviation 2.41% shows minimal variation in F.A. among these company. Growth rate averages 26.82%, indicating value of premium in total analyzed have experienced an annual increase of 26.82% from the fiscal year 2013/14 to 2022/23. A standard deviation of 43.26% suggests a significant variation among companies concerning this growth rate.

4.3 C0-relation analysis for variable

Analysis presents co-relation coeff. with significance value for assess the relation with Return on Assets (R.O.A), Return on Equity (R.O.E), the in- dependent variable. The coeff-icients indicate both strength and way of these relationships, categorizing them as strong, weak, positive, or negative. A higher coefficient value signifies a stronger relationship, while a lower coefficient suggests a weaker association. Additionally, the sign of the coefficient indicates the way of the relation; a +ve sign reflects a positive relation, whereas a negative sign indicates contrary. Data from ten fiscal years has been utilized to ensure the reliability of the results.

Table 14 ***Co-relation of ROA with independent variables***

	ROA	Com Size	LIQ.	VOC	F.A	G.R
ROA	1					
Significance						
Com Size	-.649*	1				
Significance	0.042					
LIQ.	0.594	-.652*	1			
Significance	0.070	0.041				
VOC	0.385	0.359	-0.092	1		
Significance	0.272	0.309	0.800			
F.A	0.127	-.709*	0.180	-0.427	1	
Significance	0.027	0.022	0.618	0.218		
G.R	0.240	-0.168	-0.273	-0.007	0.031	1

Significance	0.042	0.642	0.445	0.986	0.933	

*. Co-relation significance at 0.05 level (2tailed).

Source: Appendix 2

Table14 illustrates correlation coeff. between Return on Assets with various independent variable. The co relation coeff. for com. size in relation to ROA is -0.649, with value of 0.042, showing negative co relation. This suggests that a decrease in company size is associated with an increase in ROA, and conversely, an increase in company size correlates with a decrease in ROA. In contrast, the co-relation coeff of ROA and liquidity is 0.594, with a significance value of 0.070, demonstrating a significant positive correlation. This finding implies that as liquidity increases, the profit capability of non-life sector insurance also tends to rise. Lastly, the correlation coefficient for the relationship between Value of Customer (VOC) and ROA is 0.385, with a significance value of 0.272, indicating a positive relationship; however, this relationship lacks statistical significance.

The co relation coeff. of fixedassets and Return on Assets (ROA) is 0.127, with a significance value of 0.027. This suggests positive relationship at significant level between ROA and fixed assets. Furthermore, there exists a positive significant relationship of Gross Revenue (GR) and ROA, evidenced by a co relation coeff of 0.240 and a significance 0.042.

Table 15 ***Co-relation of ROE with independent variables***

	ROE	ComSize	LI.Q.	V. O. C.	F .A	G .R
ROE	1					
Com Size	-0.781**	1				
	0.008					
LIQ.	.675*	-.652*	1			
	0.032	0.041				
VOC.	0.152	0.359	-0.092	1		
	0.029	0.309	0.800			
F.A	0.266	-.709*	0.180	-0.427	1	
	0.457	0.022	0.618	0.218		
G.R	0.253	-0.168	-0.273	-0.007	0.031	1
	0.031	0.642	0.445	0.986	0.933	

**. Co-relation show significance at 0.01 level (2-tailed).

*. Co-relation show significance at 0.05 level (2-tailed).

Source: Appendix 2

Above table illustrates correlation coeff. between various independent variables and ROE. The co-relation coeff.for ROE and com size is -0.781, with value of significance of 0.008, indicating negative correlation. In contrast, for liquidity and ROE is 0.675, with a significance value of 0.032, demonstrating a significant positive correlation; this suggests that an grow in liquidity is linked with grow in the ROE of non-life insurance companies. The co-relation coeff for ROE and VOC is 0.152, with a significance value of 0.029, which signifies a positive relation of ROE and VOC. Furthermore, co relation coeff for ROE and fixed asset is 0.266, with a significance value of 0.457, indicating an insignificant positive relationship. Lastly, there exist low significant positive relation for ROE and GR, as shown by a co relation coeff. of 0.253 and value significance of 0.031.

4.4 Variables Regression analysis

The purpose of conducting re-gression analysis is to ascertain level where dependent variable is affected by the specified independent variables. In this context, Return on Assets (ROA) and Returnon Equity (ROE) serve as dependent, while liquidity, size, Value of Operations (VOC), GR, fixed assets are classified as in-dependent variables. The analysis utilizes data spanning ten fiscal years. The ANOVA section evaluates whether reject/ accept null hypo thesis. Should the null hypothesis hold true, it implies that none of the independent variables are suitable for predicting the dependent variable. Conversely, if the F-test yields a value greater than 0 and the pvalue is lower of 0.05, the null hypo thesis is dismissed, indicating that the regression model is an appropriate fit for the data.

4.4.1 Regression analysis of ROA

Table16 ***Modelsummary***

Model	R value	RSq,	AdjustedR Sq.	Standard Err. for Estimate
1	0.980	0.960	0.911	0.45291

a. Predictors:(Constant), G.R, VOC, Com Size, LIQ., F.A

b. Dependent Variable: ROA

Source: Appendix 2

The data presented in Table 16 indicates that the total variation in ReturnonAssets (ROA) is calculated with variables FixedAsset, Com. Size, LIQ., Capital and G.R. Coeff. of multiple determination, denoted as R^2, is 0.960. Which suggests these independent variables collectively explain 96% of the variation in ROA at a 95% confidence level. Margin of error is 0.45291. The results indicate that 96% of the changes in ROA for Nepalese non-life insurance companies can be attributed to FixedAsset, Com. Size, LIQ., Capital and G.R., while the remaining percentage is influenced by other quantitative and qualitative factors. The co-relation coeff., R, reflects the relation for the independent and dependent variables, and the findings demonstrate a significantly positive correlation, as evidenced by the value of 0.960.

Table17*Goodness of fit forregression(ANOVA)*

Model		Sumof Sq.	df	MeanSq.	F	Significance
1	Regresion	19.906	5	3.981	19.409	0.007
	Residual	0.820	4	0.205		
	Total	20.727	9			

a. DependentVariable: ROA

b. Predictors:(Constant),G.R, VOC, Com Size, LIQ., F.A

Source: Appendix 2

Table 17 presents the results of multiple regression analysis conducted with dependent variable(Return on Assets), while independent variables are liquidity, company size, fixed assets, volume of capital, and growth rates. The adjusted R-squared value, with a statistically significant result from the F-test (F=19. 409, p=0. 007), suggests that 96% of the variability in the dependent variable is explained by the independent variables. Significantly, the company size (t = -4. 350, p=0. 012), capital volume (t = 5. 586, p=0. 005), and growth rates (t = 0. 146, p=0. 006) were noted as key in-dependent variables that uniquely and significantly influenced the forecasting of Return on Assets. The analysis verified that the criteria for multicollinearity, normality of residuals, and homoscedasticity were all satisfied, and no outliers were found. Below are the regression results that demonstrate the individual impacts of liquidity, com. size, capital volume, fixed assets, and growth rates on ROA Return on Assets.

Table 18*Regresion result for In-dependent effectiveness on Return on Asset*

Model	Un-standardized Coeff.		Standardized value Coeff.	t	Sign.
	B	Std.Error value	Beta value		
1 (Constant)	1.999	4.108		0.487	0.652
Com Size	-0.001	0.000	-1.281	-4.350	0.012
LIQ.	-0.575	1.414	-0.087	-0.407	0.705
VOC	0.263	0.047	0.622	5.586	0.005
F.A	-0.700	0.278	-0.501	-2.514	0.066
G.R	0.331	.134	.213	2.301	0.006

a. Dependent Variable: ROA

Source: Appendix 2

According to findings presented in above, constant determined value is to be 1.999. Consequently, the regression can be expressed as follows:

ROA-Return on Assets = 1.999, Com. Size=- 0.001, Liquidity=0.575, Volume of Capital=0.263, Fixed Assets=- 0.700, Growth Rate= 0.331.

Above coeff. Table of regression coefficients for Com.Size, Volume of Capital, Liquidity, Growth Rate and Fixed Assets are -0.001, 0.575, 0.263, -0.700, 0.331. This show a unit grow in Company Size results in a decrease of 0.001 in ROA. Similarly, a unit grow in Liquidity forms to a decline to 0.575 in ROA, while a unit grow in Volume of Capital results in an increase of 0.263 in ROA. Furthermore, a one-unit increase in Fixed Assets corresponds to a decrease of 0.700 in ROA, whereas a unit grow in Growth Rate premium form to grow of 0.331 in ROA for Nepalese non-life insurance companies.

The analysis reveals a +ve relation with the ROA; dependent variable and in-dependent variable such as Volume of Capital and Growth Rate, while a negative relationship exists between ROA and Company Size, Liquidity, and Fixed Assets. Additionally, the study found that the P-value for Comp. Size, Growth Rate premium, Volume of Capital was less than 5%, indicating that these variables are significant (statistically) at the 95% confidence level. Which show Volume of Capital, Growth Rate has a significant positive impact on Return on assets ROA, whereas Fixed Assets exhibit a statistically insignificant negative influence on Return on asset ROA.

4.4.2 Regression analysis for ROE

Table19*Model's summary*

Model	R	R Square	AdjustedRSquare	Standrd. Error Estimate
1	0.958	0.918	0.815	1.18288

a. Predictors: (Constant), G.R, VOC., Com Size, LIQ., F.A

b. Dependent Variable: ROE

Source: Appendix 2

The data presented in Table 19 indicates that differentiation in ROE is accounted by variables(Com.Size, V.O.C, LIQ., Fixed.Aeests, and G.R. The coefficient of multiple determination, denoted as R Square, is calculated to be 0.918. This suggests that independent variables collectively results 91.8% of the variation in ROE at a 95% confidence interval, with an estimation error margin of 1.18. The R Square value of 91.8% highlights the influence of Vol. of Capital, Fixed.Asset, Com. Size, LIQ., and G.R on the ROE of non-life insurance in Nepal, while the remaining percentage is attributed to remaining qualitative/ quantitative factors. Additionally, the correlation coefficient R indicates a significant positive relation with independent and dependent variables, as evidenced by the value of 0.918.

Table 20*Goodness of fit of re-gression(ANOVA)*

Model		Sumof Sq.	D f	MeanSq.	F	Sign.
1	Regresion	62.466	5	12.493	8.929	0.027
	Residual	5.597	4	1.399		
	Total	68.063	9			

a. DependentVariable: ROE

b. Predictors:(Constant), G.R, VOC., Com Size, LIQ., F.A

Source: Appendix 2

Table 20 indicates that multiple regression analysis was conducted with dependent variable (Return on Equity), while independent variable is com. size, growth rates, fixed assets, capital volume, and liquidity. The adjusted Rsquare value showed no significant difference from 0 (F=8. 929, p=. 0027), indicating that 91. 8% of the variation in dependent variable was accounted by the in-dependent variables. Significantly, the in-dependent variables VOC (t = 2. 518, p = 0. 046) and G. R (t = 0. 442, p = 0. 016) have been highlighted as important factors in predicting return on equity. Furthermore, the data

met the assumptions of multicollinearity, normality of residuals, and homoscedasticity, with no outliers detected.

Table21 ***Regression for independent effect on Return On Equity Co-efficients***

Model		Un- standardized value Coeff.		Standardized value of Coeff.		
		B	Std.Error	Value of beta	t	Sign.
1	(Constant.)	9.128	10.728		0.851	0.443
	Com Size	-0.001	0.000	-1.149	-2.709	0.054
	LIQ.	0.694	3.692	0.058	0.188	0.860
	VOC.	0.310	0.123	0.404	2.518	0.046
	F.A	-0.986	0.727	-0.389	-1.357	0.246
	G.R	0.569	.278	.426	3.470	0.016

a. Dependent Variable: ROE

Source: Appendix 2

The analysis presented in Table 21 indicates that the constant value is 9.128. This information allows for the formulation of the regression equation as follows:

ROE(Return on Equity) = 9.128 Com. Size= - 0.001, Liquidity=0.694, (Volume of Capital=0.310, F.A=- 0.986, Growth Rate premium=0.569.

Above table shows, coefficients regression for five factors (Com.Size, Liquidity, Capital, FA, and Premium Growth) which are -0.001, 0.694, 0.310, -0.986, and 0.569. Which means a unit grow in Company Size results in a decrease of 0.001 in ROE(Return on Equity). Conversely, a unit growth in Liquidity goes to an increase in 0.694 in ROE, while a one-unit increase of Volume of Capital results in a 0.310 increase in ROE. Additionally, a one-unit increase in Fixed Assets corresponds decrease of 0.986 in ROE, and a one-unit increase in Growth Rate results in a 0.569 increase in ROE for Nepalese non-life insurance companies.

The findings suggest +ve relation of ROE(the dependent variable) and independent variable like Growth Rate, Volume of Capital, and Liquidity, while indicating a negative relationship between ROE and Company Size as well as Fixed Assets. Furthermore, the study revealed that the p-values for Volume of Capital and Growth Rate were less than 5%, indicating that these variables show significant statistical impact on ROE at 95% confidence levels, thereby demonstrating a significantly positive influence. In contrast, Fixed Assets and Company Size exhibit statistically insignificant negative influences on ROE.

4.4.3 Residual analysis

Residual analysis for the model is conducted through several residual plots, including histograms that focus on regression standardized residuals, as well as scatter plots that examine the relation of regresion standardized residuals and regression standardized predicted values. Additionally, outliers are identified by calculating the Mahalanobis distance. The histogram analysis shows the error patterns are distributed normally. Similarly, the scatter plot reveals that the residuals are randomly dispersed around zero, suggesting that the errors exhibit constant variance. The residual analysis for R.O.A. and R.O.E. is performed using various residual plots, including histograms and scatter plots, as detailed below.

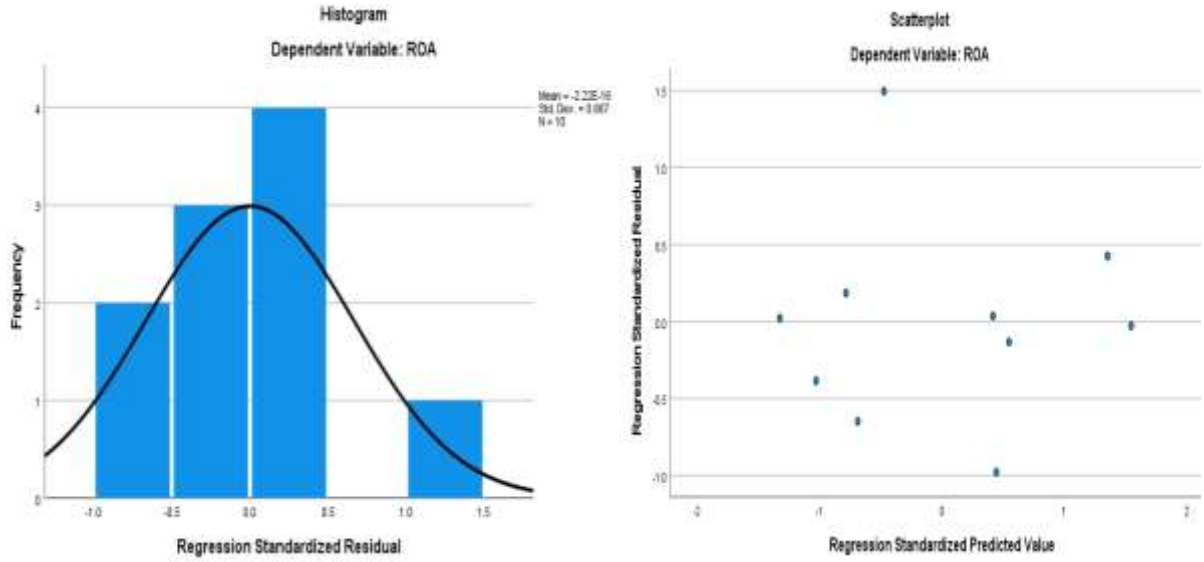


Figure11: *Histogram and scatter plot of ROA*

Source: SPSS regression output

Based on Figure 11, R.O.A. (dependent variable) exhibits a bell-shaped curve, suggesting as a normally distribution and is appropriately modeled. Consequently, the normality of the data is confirmed through graphical methods, particularly the histogram. Similarly, the scatter-plot of the residuals for dependent variable ROA shows a random distribution around zero, indicating that the errors are consistent.

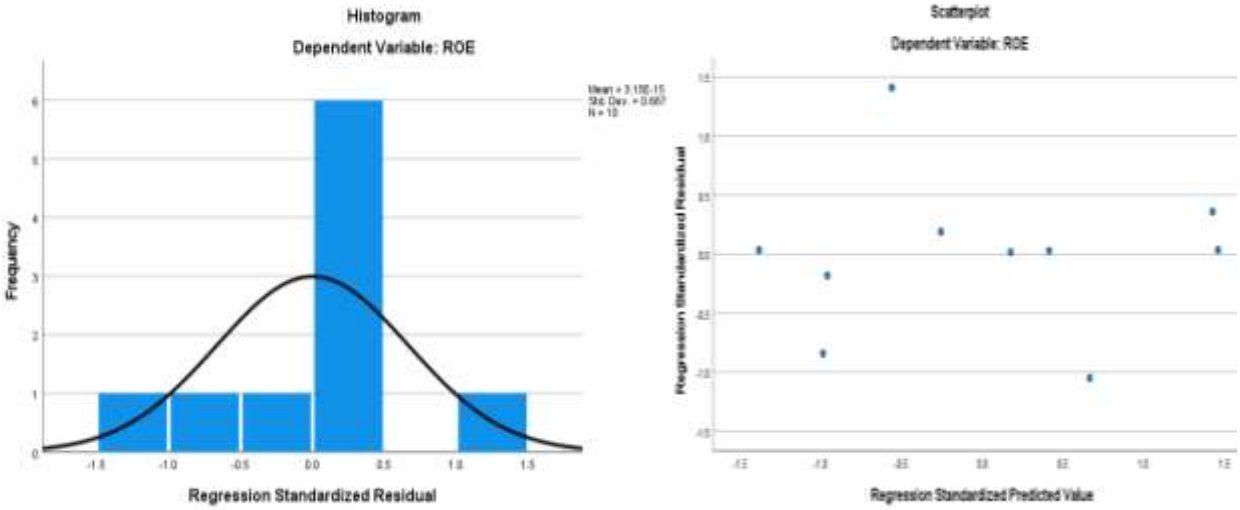


Figure12: *Histogram and scatter plot of ROE*

Source: SPSS regression output

Figure 12 illustrates that variable R.O.E., exhibits a bell-shaped distribution, showing that the data follows a normally distribution and is appropriately modeled. Consequently, the normality of the data is confirmed through graphical methods, particularly the histogram. Furthermore, the scatter plot of the dependent variable ROE's residuals shows a random distribution around zero, suggesting that the variance of the errors remains constant. Five instances were identified as outliers from zero in ROE; however, these outliers were included in the analysis due to their insignificant quantity. The normal P-P plot of the regression standardized residuals for the dependent variable, which is shown below, can also help to clarify this finding.

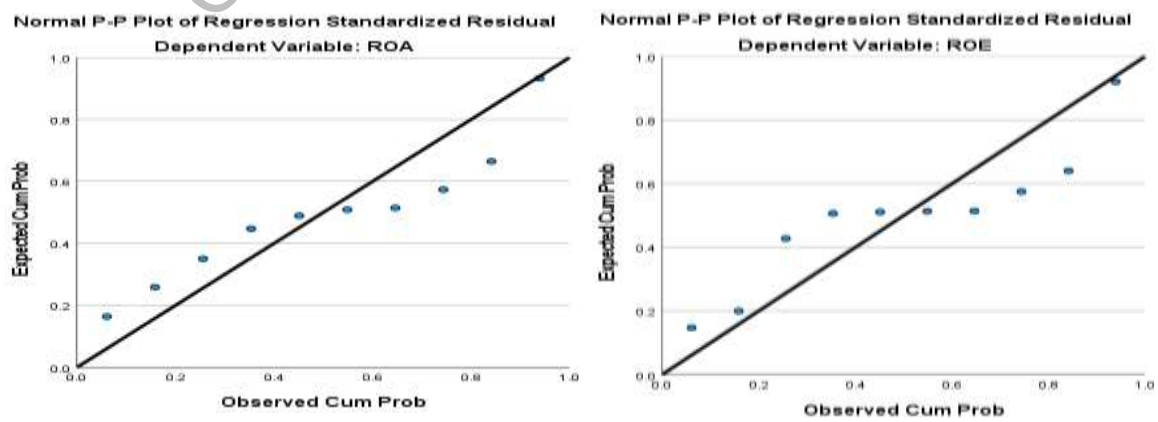


Figure13: *Normal PP regression standardized residual plot ROA & ROE*

Source: SPSS 27 Regresion 0utput.

Both dependent variables, ROA and ROE, show a normal distribution of residuals centered around a mean of zero, as shown in Fig. 13. The graphical techniques used to evaluate normality, namely the normal probability-probability (p-p) plot of the regression standardized residuals, thus demonstrate that the data can be regarded as normally distributed.

4.4.4 Multicollinearity diagnosis

The diagnosis of multicollinearity indicates that the models are not affected by multicollinearity issues, as the Variance Inflation Factor (VIF) for each independent variable remains below

Table22 ***Multicollinearity diagnosis***

Model		Collinearity statistics	
		Tolerance	VIF
	(Constant)		
	Com Size	0.114	8.757
	LIQ.	0.415	2.409
	VOC	0.798	1.254
	F.A	0.350	2.857
	G.R	.750	1.366

Source: SPSS output

Table 22 presents the variance inflation factors (VIF) for the independent variables, serving as an additional indicator of multicollinearity. Each independent variable exhibits a VIF value below 10, indicating the absence of multicollinearity among them.

4.5 Hypotheses Testing Summary

The variables examined include Com. Size, vol. of capital, liquidity., fixed asset, and premium growth rate.

Table 23 Hypothesis Testing Summary

Hyp.	Statement	P Values	Result
H1:	There exist significant positive relation of Growth Rate and ROE(Return on Equity).	0.016	Accepted
H2:	There exist significant positive relation of Growth Rate and ROA(Return on Assets).	0.006	Accepted
H3:	There exist significant positive relation of Volume of Capital and ROE(Return on Equity).	0.046	Accepted
H4:	There exist significant positive relation of Volume of Capital and ROA(Return on Assets).	0.005	Accepted
H5:	There exist significant negative relation of Company size and ROE(Return on Equity).	0.054	Rejected

H6:	There exist significant negative relation of Company size and ROA(Return on Assets).	0.012	Rejected
H7:	There exist significant negative relation of liquidity and ROE(Return on Equity).	0.860	Rejected
H8:	There exist significant negative relation of liquidity and ROA(Return on Assets).	0.705	Rejected
H9:	There exist significant positive relation of fixed assets and ROE(Return on Equity).	0.246	Rejected
H10:	There exist significant positive relation of fixed assets and ROE(Return on Equity).	0.066	Rejected

Source: SPSS output

Table 23 provides a summary of the findings from hypothesis testing concerning the factors influencing the profit capability of non-life insurance of Nepal. The above table outlines 10 hypotheses i.e. H1 to H10), along with their respective p-values and outcomes.

Hypotheses H1, H2, H3, and H4 suggest a significant correlation between the growth rate and the vol. of capital with profit, specifically measured by Return on Asset(ROA) and ROE. The p-values for these hypotheses are 0.016, 0.006, 0.046, and 0.005, respectively, all of which are below the threshold of 0.05. Consequently, we accept these hypotheses, indicating that there is substantial statistical evidence to affirm that the profit capability of non-life insurance in Nepal is influenced by volume of capital and the growth rate.

The p-value linked to hypothesis H5 is 0.054, which exceeds the standard alpha level of 0.05. In contrast, the p-value for hypothesis H6 is 0.012; however, H6 presents a negative F value. Also p-values for H7 to H10 are 0.860, 0.750, 0.246 and 0.066 respectively which is above 0.05. Consequently, we reject this hypothesis, indicating that there is insufficient statistical evidence to substantiate the assertion that com. size influences the profit capability of non-life insurance in Nepal.

4.6 Findings

The variables examined in this study include Com. Size, LIQ., V.O.C, FA, and GR. The analysis primarily relies on results derived from descriptive co-relation, statistics and analysis of regression. The assessment of normality, conducted through three graphical methods—namely, histogram, normal PP plot of regression standard residuals, and scattered plot—indicates data conforming in a normal distribution. The overall findings reveal that ROA demonstrates more significant results in comparison to ROE. Additionally, the combined internal in-dependent variables (R^2) for the ROA model is

higher at 96%, compared to 91.8% for the ROE model. The remaining variance is accounted for by other variables within this model.

1. According to the return on equity, NECO exhibits the highest mean value at 16.30%, while NICL records the lowest mean value at 10.26%. This indicates that NECO generates a superior return on owners' equity. The descriptive statistics identify the average ROA and ROE stand at 6.84% and 14.08%, respectively, with standard deviations of 2.63% and 5.21%. This suggests that the profit generating capacity of non-life insurance of Nepali companies is satisfactory, accompanied by a moderate variation in returns. Regarding the determinant of company size, the average is Rs. 4,074.41 million, with a standard deviation of Rs. 2,471.27 million. The average liquidity ratio is 1.05%, with a deviation of 0.28, indicating a declining trend in the liquidity capacity of non-life insurance companies, which may adversely affect their goodwill. The average value of the volume of capital (VOC) is 47.39%, with a variation of 5.99%, reflecting a substantial capital volume among nonlife insurance of Nepal. The average fixed assets (F.A) ratio is 5.45%, with a consistent variation of 2.41%. Lastly, the average growth rate (G.R) is 26.82%, accompanied by a deviation of 43.26%, indicating a slightly fluctuating growth pattern within the non-life insurance sector.
2. The determinants of profitability performance examined in this study reveal that liquidity (LIQ) exhibits a strong positive correlation of 0.5, while financial assets (F.A.) show a weaker positive correlation of 0.124, and growth rate (GR) demonstrates a low positive correlation of 0.240 with the profitability performance indicator, ROA, for non-life insurance of Nepal. Conversely, company size (Com. Size) is negatively correlated at a moderate level of 0.649, whereas the volume of operations (VOC) is positively correlated at a medium level with the profitability performance, as shown by ROA. The -ve co-relation of Com. Size with the profit of non-life insurance of Nepal, based on Return on assets, is deemed insignificant. In terms of the profit measure return on equity (ROE), growth rate (G.R.), volume of operations (VOC), financial assets (F.A.), and liquidity (LIQ) are significantly positively correlated, while company size shows a negative correlation with the profit capacity of non-life insurance of Nepal based on ROE.

   The regression analysis shows com. size has a -ve impact on ROA, suggesting that a smaller company size is associated with improved profitability for Nepalese non-life insurance companies. However, growth rate is positively influential at a 5%

significance level in relation to ROA. Additionally, the regression model concludes that both VOC and G.R. exert positive influences at a 5% significance level, while company size negatively influences ROE at a 1% significance level for nonlife insurance sector in Nepal.

4.7 Discussion

Regression analysis indicated that the Comp. size negatively influences the nonlife insurance company profitability of our nation. In contrast, various international studies have demonstrated a +ve correlation of com. size and profit of non-life companies in insurance (Jibran & Lire, 2016). One possible reason for discrepancy is that this sector, including life insurance related companies, are comparatively less impacted by company size in terms of profitability compared to industrial firms. Nevertheless, the findings of this study do not align with the results regarding the effect of com. size on the profit of non-life companies of Nepal. This relationship varies based on country, sector, and organizational investment strategies. Consequently, insurers should assess their asset management policies and ensure the effective utilization of their assets.

The result from the analysis of regression show insignificant negative correlation with liquidity and the profit of non-life insurance companies, as given by ROA, while a positive correlation is observed with ROE. This phenomenon shall be attributed to fact that a higher current ratio, which reflects liquidity, is associated with lower profitability (Chen & Wong, 2004). This suggests that cash flows retained in liquid assets may limit investment opportunities that could yield higher returns (Chen & Wong, 2004).

Furthermore, the regression analysis has validated the significant relationship (positive) between the vol. of capital (VOC) and both Return Of Asset(ROA) and ROE, aligning with findings from prior research. Previous studies have demonstrated that capital positively influences the profitability of life insurance companies (Malik, 2011), as increased capital allows these companies to seize more opportunities in the market and respond effectively to potential losses. Also the impact of capital level on the profit of life sector insurance may influenced by macro- economic data unique to different country, that are not addressed in analysis.

Regression analysis indicated that increment in F.A. is associated with a decreasing in the profit of non-life insurance companies, as evidenced by a -vr co-relation with both R.O.A) and R.O.E). This result is consistent with earlier studies. The underlying reason for this outcome may be attributed to the notion; increase in F.A. do not positive-ly influence profit of company. Furthermore, the regression analysis revealed that the

growth rate of non-life insurance companies has a positive and statistically significant effect on their profitability. This can be explained by the premise that an increase in premium collection positively impacts the profitability of non-life insurance companies. This conclusion is also supported by findings from international scholars (Kaya, 2015; Malik, 2011; Yuqi, 2007;Naveed,Zulfqar &Ahmad, 2011), who highlighted the relationship between growth rates and profitability. They emphasized that the success of a product is often measured by the premiums collected. Additionally, evidence suggests that investments in human resources enhance the overall premium, thereby improving the cash flow of non-life insurance companies.

CHAPTER V
SUMMARY & CONCLUSION

This part encompasses conclusions and summary of study. It begins with a comprehensive overview of the entire study and concludes with suggestions, implications for upcoming study at end part.

5.1 Summary

Nonlife insurance companies accept premiums to manage financial risks and provide compensation to consumers for property, casualty, and financial losses. These institutions play a crucial role in insurance economic activities, thereby contributing to maintain stable financial mechanism and the economy of a country. They function as a vital component of the economic immune and repair system. Consequently, it is essential to conduct empirical research to determine relevant factors responsible for profitability of nonlife insurance of Nepal. This study aims to assist relevant stakeholders by highlighting the pertinent factors under discussion. It investigates and explores the possible factors affecting the profit of non-life insurance of Nepal. The research methodology employed includes financial and statistical tools to assess the company-specific factors of selected nonlife insurance companies, specifically PRABHU, NICL, SICL, and NECO, over the period from 2013/14 to 2022/23. The study relies on secondary data, which presents certain limitations regarding its reliability. The validity of the findings is contingent upon the authenticity of the collected data. The analysis encompasses data from FY 2013/14 to FY 2022/23, utilizing descriptive, correlation, and regression models through SPSS27.

The key findings indicate that the company-specific determinants, namely VOC and G.R., which are significant at the 5% statistically concerning the profit of nonlife insurance of Nepal. Thus, the profitability of these companies is largely influenced by their VOC and G.R.

5.2 Conclusion

The research findings indicate that the factors influencing profitability are primarily related to company size, which is trending upward based on total assets, while liquidity conditions is lowered over last 2 years. Additionally, fixed assets, volume of business (premium collection), and its growth rate of premiums exhibit fluctuating trends. Overall, the analysis suggests that firm-specific factors are performing satisfactorily.

Further examination showed a negative correlation between certain determinants like company size, liqu., and fixedassets, with return on assets (ROA). Conversely, positive correlation (significant) was found for the growth rate and ROA. Similarly, a notable positive relationship exists between volume of business and growth rate in relation to return on equity (ROE). Thus, the study identifies both significant and insignificant relationships between profitability and company-specific determinants, with varying impacts.

The main theme from the study is growth rate and volume of business are the key positive factors influencing profit of non-life insurance of Nepal. The results indicate that both growth rate and volume of business positively affect ROE and ROA, while com. size negatively impacts ROA. This suggests that increases in growth rate and volume of business correspond to higher returns on equity, whereas the opposite is true for company size in Nepalese non-life insurance industry.

5.3 Implications

Research was performed with the aim of exploring the factors/determinants influencing the profitability of sample non-life insurance sectors. On the basis of analysis, implications can be drawn as following: The non-life insurance sector in Nepal is experiencing growth, as evidenced by the increasing number of companies, which indicates a competitive market environment. Insurers are advised to make prudent investment decisions to diversify their portfolio management, thereby maximizing the utilization of their expanding assets. It has been observed that high levels of fixed asset negatively affect the profit of insurance; therefore, insurers should maintain a conservative approach regarding fixed asset investments. Given that service providers in the insurance sector do not require substantial fixed asset investments, a cautious stance is recommended. Additionally, the variables of Value of Capital (VOC) and Growth Rate (GR) positively influence profitability; thus, companies should prioritize enhancing shareholder equity and improving premium collection efforts. Furthermore, it is recommended that these companies expand their insurance operations and raise awareness in rural areas by establishing branches or appointing agents, in accordance with their potential, to maximize profitability.

5.4 Area/Scope for further study/research

The research utilizes secondary data source to examine quantitative items that may influence the profitability of non-life insurance of Nepal. Recommendations for future study might be as below:

i. Subsequent studies shall investigate external/internal factors to enhance the understanding of management and regulatory implications.

ii. Future inquiries should assess the efficiency of resource allocation and risk management practices, focusing on the elements that impact the profitability of non-life insurance of Nepal.

iii. The research and findings of study is primarily relevant to non-life insurance sector of Nepal. Future research could expand to include other sectors, like A class banks, B class banks, finance companies, hotels, other different service, manufacturing industries, micro-finance companies, and hydropower companies listed on NEPSE.

iv. Additional determinants, such as claim ratios, management effectiveness, and working capital, should be considered when analyzing factors that affect profitability.

v. This study relies solely on secondary sources of data and will not account for the preferences of various stakeholders. So, upcoming research could benefit from incorporating primary data.

vi. The limited sample size and time frame of this study suggest that future research should aim for a larger sample size and an extended duration to yield more comprehensive insights.

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Appendix 1

Values of financial statements of respective insurance companies

Neco Insurance Company Limited (NECO)															
Year	**ROA**	**ROE**	**Company Size (Rs)**	**Log Company size**	**Total Assets (Rs)**	**Total Equity (Rs)**	**Current Assets (Rs)**	**Current Liabilities (Rs)**	**Liquidity**	**VOC**	**FA**	**Growth**	**Fixed Assets (Rs)**	**Gross premium (Rs)**	**Net Income (Rs)**
2013/2014	0.04688062	0.10641859	782803293	8.89365264	782803293	344848620	238496310	438772242	0.54355377	0.44053036	0.01652419	0.09482101	12935191	451514253	36698305
2014/2015	0.09191919	0.18550898	1002877613	9.00124793	1002877613	496923110	360182395	506524370	0.71108601	0.49549726	0.01570436	0.17648555	15749548	531199997	92183702
2015/2016	0.09149245	0.19765413	1328791424	9.12345681	1328791424	615086520	473997314	714027069	0.66383661	0.46289169	0.02187256	0.70889254	29064069	907763715	121574394
2016/2017	0.08872906	0.16970355	2350208213	9.37110634	2350208213	1228800282	506266866	1121407932	0.45145647	0.52284741	0.08475693	0.50072493	199196437	1362303643	208531771
2017/2018	0.08248455	0.14827932	3284053699	9.51641025	3284053699	1826847591	665469079	1455688103	0.45715086	0.55627823	0.06631467	0.21922013	217780949	166094803 4	270883718
2018/2019	0.09047584	0.15915490	3856551582	9.58619914	3856551582	2192359304	723646938	1664192277	0.43483373	0.56847659	0.08133487	0.15371240	313672112	191625634 4	348924742
2019/2020	0.09561694	0.18838647	5047457794	9.70307269	5047457794	2561874411	1426783867	2485583382	0.57402373	0.50755737	0.08188	0.04111037	413285850	199503436 1	482622491
2020/2021	0.07099028	0.16466622	7141561876	9.85379320	7141561876	3078843457	2915837588	4062718418	0.71770605	0.43111626	0.06254053	0.11545265	446637048	222536637 2	506981534
2021/2022	0.06551774	0.15024133	8354134506	9.92190146	8354134506	3643098743	3137016162	4711035763	0.66588672	0.43608332	0.06433547	0.17684550	537467169	261891241 6	547344015
2022/2023	0.08472184	0.15987356	8321496088	9.92020141	8321496088	4409812911	2558627460	3911683177	0.65409884	0.52993029	0.07141983	0.15824500	594319808	303334221 6	705012511

Source: Annual Report of NECO

Shikhar Insurance Company Limited (SICL)															
Year	**ROA**	**ROE**	**Company Size (Rs)**	**Log Company size**	**Total Assets (Rs)**	**Total Equity (Rs)**	**Current Assets (Rs)**	**Current Liabilities (Rs)**	**Liquidity**	**VOC**	**FA**	**Growth**	**Fixed Assets (Rs)**	**Gross premium (Rs)**	**Net Income (Rs)**
2013/2014	0.09515344	0.22361935	1378059684	9.13926802	1378059684	586385427	1014647659	791674257	1.28164791	0.42551526	0.16066460	0.34154692	221405418	449940221	131127131
2014/2015	0.11786268	0.27481209	1863345058	9.27029328	1863345058	799160092	1385399946	1064184966	1.30184130	0.42888464	0.11382192	0.43074145	212089520	643748125	219618855
2015/2016	0.11517540	0.21533574	2662124952	9.42522843	2662124952	1423875605	2189487738	1238249347	1.76821231	0.53486430	0.07870610	0.60476296	209525482	1033063148	306611312
2016/2017	0.10467139	0.20308924	3439371171	9.53647904	3439371171	1772638395	2875410747	1666732776	1.72517801	0.51539607	0.05953335	0.36997928	204757319	1415275112	360003789
2017/2018	0.09282574	0.21657411	5325470776	9.72635800	5325470776	2282547821	2197163592	3042922955	0.72205692	0.42860958	0.10578945	1.35768823	563378664	3336777487	494340779
2018/2019	0.07529661	0.15776286	5677915636	9.75418893	5677915636	2709939514	2036792397	2967976122	0.68625632	0.47727717	0.10683440	0.02939618	606596726	3434866030	427527833
2019/2020	0.05053637	0.12316437	8098291979	9.90839343	8098291979	3322862903	4284131155	4775429076	0.89711962	0.41031651	0.07703894	(0.03763563)	623883859	3305592653	409258334
2020/2021	0.03281780	0.08117071	9506666457	9.97802825	9506666457	3843602198	5556042258	5663064259	0.98110175	0.40430599	0.06955518	0.13567711	661237904	3754085910	311987941
2021/2022	0.02425037	0.05816711	11264333354	10.0517054	11264333354	4696198780	6315094214	6568134574	0.96147454	0.41690871	0.06921631	0.17009665	779675638	4392643361	273164331
2022/2023	0.02047575	0.04627299	11043563217	10.0431092	11043563217	4886766576	5900960705	6156796641	0.95844658	0.44249908	0.07077841	0.20570752	781645864	5296243137	226125314

Source: Annual Report of SICL

Nepal Insurance Company Limited (NICL)															
Year	**ROA**	**ROE**	**Company Size (Rs)**	**Log Company size**	**Total Assets (Rs)**	**Total Equity (Rs)**	**Current Assets (Rs)**	**Current Liabilities (Rs)**	**Liquidity**	**VOC**	**FA**	**Growth**	**Fixed Assets (Rs)**	**Gross premium (Rs)**	**Net Income (Rs)**
2013/2014	0.02096551	0.06185171	1337339064	9.12624153	1337339064	453310036	1148547863	884029028	1.29921962	0.33896417	0.02223725	0.02661056	29738753	426128888	28038002
2014/2015	(0.01332158)	(0.0449277)	1600756571	9.20432529	1600756571	479282663	1249269630	1121473908	1.11395336	0.29941008	0.01775772	0.03711823	28425795	441946042	(21324617)
2015/2016	0.03450380	0.10966887	1619526260	9.20938799	1619526260	509532208	1297438545	1109994052	1.16886981	0.31461805	0.01927250	(0.15677474)	31212327	372660063	55879825
2016/2017	0.07310501	0.19741831	1574764192	9.19721553	1574764192	583143285	1283134188	991620907	1.29397653	0.37030514	0.01953369	(0.17041393)	30760964	309153596	115123162
2017/2018	0.02658413	0.07889822	3233581773	9.50968384	3233581773	1089529972	1556852137	2144051801	0.72612617	0.33694214	0.01413948	1.84236574	45721177	878727590	85961979
2018/2019	0.0568816	0.12647075	4273468840	9.63078054	4273468840	1712761761	2191399547	2560707079	0.85577908	0.40078957	0.01893025	0.34170398	80897868	1178992313	216614279
2019/2020	0.05317812	0.12856862	4739821284	9.67576196	4739821284	1960468987	2267638153	2779352297	0.81588726	0.41361664	0.01673671	(0.00784697)	79329031	1169740787	252054792
2020/2021	0.04966779	0.10609587	4796944913	9.68096473	4796944913	2245645262	2215035271	2551299651	0.86819879	0.46814072	0.01729434	0.66820819	82960032	1951371166	238253692
2021/2022	0.06378387	0.13256401	5199831887	9.71598930	5199831887	2501926382	1638111564	2697905505	0.60717899	0.48115524	0.01668873	(0.22328936)	86778627	1515650743	331665411
2022/2023	0.06974149	0.12862918	5349690083	9.72832862	5349690083	2900549910	1562909401	2449140173	0.63814616	0.54219027	0.02552744 1	0.03342562	136563900	1566312317	373095379

Source: Annual Report of NICL

Prabhu Insurance Company Limited (PICL)															
Year	**ROA**	**ROE**	**Company Size (Rs)**	**Log Company size**	**Total Assets (Rs)**	**Total Equity (Rs)**	**Current Assets (Rs)**	**Current Liabilities (Rs)**	**Liquidity**	**VOC**	**FA**	**Growth**	**Fixed Assets (Rs)**	**Gross premium (Rs)**	**Net Income (Rs)**
2013/2014	0.06727986	0.15344048	869504385	8.93927177	869504385	381256225	704527241	488248160	1.44296957	0.43847533	0.12201510	0.11633418	106092671	346321582	58500138
2014/2015	0.08574335	0.16797877	1119318403	9.04895364	1119318403	571346636	831164826	547971767	1.51680228	0.51044156	0.08964941	0.05550923	100346236	365545629	95974110
2015/2016	0.12047678	0.20795300	1239848667	9.09336867	1239848667	718301586	964827508	521547081	1.84993367	0.57934617	0.07895853	0.19245074	97896630	435895158	149372975
2016/2017	0.09839103	0.14863069	1674499884	9.22388512	1674499884	1108490920	1361484197	566008964	2.40541101	0.66198327	0.05659607	(0.10184689)	94770123	391500588	164755773
2017/2018	0.09706380	0.16447769	2464684007	9.39176124	2464684007	1454492745	1228635911	1010191262	1.21624088	0.59013355	0.03884534	1.59069144	95741510	1014257224	239231613
2018/2019	0.08723328	0.13918606	2950915681	9.4699568	2950915681	1849452766	1562492512	1101462915	1.41856116	0.62673860	0.03173127	(0.11221556)	93636323	900441780	257418054
2019/2020	0.07315405	0.13083313	3532850861	9.54812530	3532850861	1975358553	2226549772	1557492308	1.42957352	0.55914009	0.02584407	0.42312623	91303245	1281442318	258442350
2020/2021	0.05194974	0.10157915	4302508384	9.63372172	4302508384	2200394451	2902535241	2102113933	1.38076970	0.51142130	0.02066370	0.15645598	88905752	1481931638	223514216
2021/2022	0.04162960	0.07818036	4470994994	9.65040418	4470994994	2380722360	2908986752	2090272634	1.39167815	0.53248155	0.02565644	(0.04536663)	114709847	1414701388	186125745
2022/2023	0.04595923	0.08468478	4896655314	9.68989953	4896655314	2657461190	2806882157	2239194124	1.25352336	0.54270946	0.02363229	0.10848751	115719196	1568178822	225046535

Source: Annual Report of PICL

Appendix 2

SPSS Output

Size of Selected Nonlife insurance Companies (in millions.)

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	869.50	1337.34	1378.06	782.80	1091.93	309.37
2014/2015	1119.32	1600.76	1863.35	1002.88	1396.57	404.74
2015/2016	1239.85	1619.53	2662.12	1328.79	1712.57	653.47
2016/2017	1674.50	1574.76	3439.37	2350.21	2259.71	858.57
2017/2018	2464.68	3233.58	5325.47	3284.05	3576.95	1224.49
2018/2019	2950.92	4273.47	5677.92	3856.55	4189.71	1135.40
2019/2020	3532.85	4739.82	8098.29	5047.46	5354.61	1942.41
2020/2021	4302.51	4796.94	9506.67	7141.56	6436.92	2392.01
2021/2022	4470.99	5199.83	11264.33	8354.13	7322.32	3121.92
2022/2023	4896.66	5349.69	11043.56	8321.50	7402.85	2863.28
Mean	2752.18	3372.57	6025.91	4146.99		
Std. Dev	1503.61	1685.35	3750.18	2945.95		

Liquidity of Selected Nonlife Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std.Dev
2013/2014	1.44	1.30	1.28	0.54	1.14	0.41
2014/2015	1.52	1.11	1.30	0.71	1.16	0.34
2015/2016	1.85	1.17	1.77	0.66	1.36	0.56
2016/2017	2.41	1.29	1.73	0.45	1.47	0.82
2017/2018	1.22	0.73	0.72	0.46	0.78	0.32
2018/2019	1.42	0.86	0.69	0.43	0.85	0.42
2019/2020	1.43	0.82	0.90	0.57	0.93	0.36
2020/2021	1.38	0.87	0.98	0.72	0.99	0.28
2021/2022	1.39	0.61	0.96	0.67	0.91	0.36
2022/2023	1.25	0.64	0.96	0.65	0.88	0.29
Mean	1.53	0.94	1.13	0.59		
Std. Dev	0.35	0.26	0.38	0.11		

Volume of Capital of Selected Nonlife Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	43.85%	33.90%	42.55%	44.05%	41.09%	4.84%
2014/2015	51.04%	29.94%	42.89%	49.55%	43.36%	9.62%
2015/2016	57.93%	31.46%	53.49%	46.29%	47.29%	11.59%
2016/2017	66.20%	37.03%	51.54%	52.28%	51.76%	11.91%
2017/2018	59.01%	33.69%	42.86%	55.63%	47.80%	11.70%
2018/2019	62.67%	40.08%	47.73%	56.85%	51.83%	9.96%
2019/2020	55.91%	41.36%	41.03%	50.76%	47.27%	7.32%
2020/2021	51.14%	46.81%	40.43%	43.11%	45.37%	4.65%
2021/2022	53.25%	48.12%	41.69%	43.61%	46.67%	5.15%
2022/2023	54.27%	54.22%	44.25%	52.99%	51.43%	4.83%
Mean	55.53%	39.66%	44.85%	49.51%		
Std. Dev	6.37%	7.99%	4.54%	5.04%		

Fixed Assets of Selected Nonlife Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	43.85%	33.90%	42.55%	44.05%	8.04%	7.22%
2014/2015	51.04%	29.94%	42.89%	49.55%	5.92%	5.01%
2015/2016	57.93%	31.46%	53.49%	46.29%	4.97%	3.37%
2016/2017	66.20%	37.03%	51.54%	52.28%	5.51%	2.69%
2017/2018	59.01%	33.69%	42.86%	55.63%	5.63%	3.93%
2018/2019	62.67%	40.08%	47.73%	56.85%	5.97%	4.14%
2019/2020	55.91%	41.36%	41.03%	50.76%	5.04%	3.38%
2020/2021	51.14%	46.81%	40.43%	43.11%	4.25%	2.74%
2021/2022	53.25%	48.12%	41.69%	43.61%	4.40%	2.67%
2022/2023	54.27%	54.22%	44.25%	52.99%	4.78%	2.69%
Mean	5.14%	1.88%	9.12%	5.67%		
Std. Dev	3.47%	0.32%	3.08%	2.78%		

Growth Rate of Selected Life Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	11.63%	2.66%	34.15%	9.48%	14.48%	13.66%
2014/2015	5.55%	3.71%	43.07%	17.65%	17.50%	18.14%
2015/2016	19.25%	-15.68%	60.48%	70.89%	33.73%	39.78%
2016/2017	-10.18%	-17.04%	37.00%	50.07%	14.96%	33.54%
2017/2018	159.07%	184.24%	135.77%	21.92%	125.25%	71.67%
2018/2019	-11.22%	34.17%	2.94%	15.37%	10.31%	19.26%
2019/2020	42.31%	-0.78%	-3.76%	4.11%	10.47%	21.48%
2020/2021	15.65%	66.82%	13.57%	11.55%	26.89%	26.67%
2021/2022	-4.54%	-22.33%	17.01%	17.68%	1.96%	19.20%
2022/2023	10.85%	3.34%	20.57%	15.82%	12.65%	7.36%
Mean	23.84%	23.91%	36.08%	23.46%		
Std. Dev	50.07%	62.29%	39.98%	20.72%		

Return on Assets of Selected Nonlife Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	6.73%	2.10%	9.52%	4.69%	5.76%	3.14%
2014/2015	8.57%	-1.33%	11.79%	9.19%	7.06%	5.76%
2015/2016	12.05%	3.45%	11.52%	9.15%	9.04%	3.93%
2016/2017	9.84%	7.31%	10.47%	8.87%	9.12%	1.37%
2017/2018	9.71%	2.66%	9.28%	8.25%	7.47%	3.27%
2018/2019	8.72%	5.07%	7.53%	9.05%	7.59%	1.80%
2019/2020	7.32%	5.32%	5.05%	9.56%	6.81%	2.09%
2020/2021	5.19%	4.97%	3.28%	7.10%	5.14%	1.56%
2021/2022	4.16%	6.38%	2.43%	6.55%	4.88%	1.96%
2022/2023	4.60%	6.97%	2.05%	8.47%	5.52%	2.81%
Mean	7.69%	4.29%	7.29%	8.09%		
Std. Dev	2.56%	2.64%	3.79%	1.53%		

Return on Equity of Selected Life Insurance Companies

Year	PRABHU	NICL	SICL	NECO	Mean	Std. Dev
2013/2014	15.34%	6.19%	22.36%	10.64%	13.63%	6.92%
2014/2015	16.80%	-4.45%	27.48%	18.55%	14.60%	13.53%
2015/2016	20.80%	10.97%	21.53%	19.77%	18.27%	4.92%
2016/2017	14.86%	19.74%	20.31%	16.97%	17.97%	2.53%
2017/2018	16.45%	7.89%	21.66%	14.83%	15.21%	5.68%
2018/2019	13.92%	12.65%	15.78%	15.92%	14.56%	1.57%
2019/2020	13.08%	12.86%	12.32%	18.84%	14.27%	3.06%
2020/2021	10.16%	10.61%	8.12%	16.47%	11.34%	3.59%
2021/2022	7.82%	13.26%	5.82%	15.02%	10.48%	4.37%
2022/2023	8.47%	12.86%	4.63%	15.99%	10.49%	4.98%
Mean	13.77%	10.26%	16.00%	16.30%		
Std. Dev	4.03%	6.30%	7.90%	2.58%		