

CHAPTER - I

INTRODUCTION

1.1 Background of the study

Insurance is defined as a protection against future losses to the things we care for, due to the events that are uncertain and unexpected. According to Oxford English Dictionary, Insurance is "an arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness or death in return for the payment of a specified premium amount". And insurance premium is an amount paid periodically or in a lump-sum to the insurer by the beneficiary for covering their risk. Insurance in a country also plays a role of financial intermediation to transfer the excess fund of the saver to the deficit units to smoothly run the economy.

Insurance provides an economic function of distributing risks. Minimizing the risk of operation of whole economy, the insurance companies encourage other larger projects. The protection against import and export of goods and raw materials fosters production. Just like the depository institution, insurance companies invest their revenue on various sector of the economy which in-turn helps in improving various macro-economic variables. Without insurance, business would face significant liabilities when conducting what we consider the simplest business function from signing to everyday operation (Gonga & Sasaka, 2017).

The insurance industry plays a critical role, providing individuals and businesses with a broad spectrum of financial security products and playing a major role in financial intermediation, thus enhancing a nation's financial and economic development. Individuals and their families look to insurance companies to provide life insurance, retirement income, health insurance, and automobile and homeowners property and liability coverage (Baltensperger, 2011). The insurance in developed countries has become a part of life but in developing countries like Nepal, the industry is gradually developing.

The performance of the businesses is very important because it leads towards the growth of the whole sector where it is involved and of the overall prosperity of the economy. Profitability, defined as proxy of financial performance, is one of the main objectives of insurance companies' management. Discussing and analysing the determinants of performance of insurance companies, is considered important in the corporate finance literature because of their role as intermediaries. These companies provide the mechanism of risk transfer and also these institutions channelize the funds to support the business activities in the economy (Burca & Batrinca, 2014).

The performance of any business firm not only plays the role to increase the market value of that specific firm but also leads towards the growth of the whole sector which ultimately leads towards the overall prosperity of the economy. Assessing the determinants of performance of insurers has gained the important in the corporate finance literature because as intermediaries, these companies are not only providing the mechanism of risk transfer, but also helps to channelize the funds in an appropriate way to support the business activities in the economy. However, it has received little attention particularly in developing economies (Ahmed et al. 2011).

Company's performance is very essential to manage as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the morale and ethic. Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage. There are two kinds of performance financial and non-financial (Iswati & Anshori, 2007).

The performance of the business is very important because it leads to the growth of the whole sector where it is involved and of overall prosperity of the economy. Discussing and analysing the financial performance and relationship between the firm's characteristics of insurance companies is important in corporate financial literature because of their role as intermediaries. These companies provide the mechanism of risk transfer and these institutions channelize the funds to support the business activities in the economy. The insurance companies had played greater role

in the 21st century. Companies are accepting the risk of the individual and business and providing them a secure life and business (Cekrezi, 2015).

History of insurance in Nepal is not so long. Established on 1947 A.D. the first insurance company in Nepal is "Nepal Malchalani Tatha Beema Company". Later in 1959 A.D., it renamed as "Nepal Insurance & Transport Company Limited". Now the company is named "Nepal Insurance company Ltd." since 1991 A.D. Some years later, to regulate the insurance industry in the country the Insurance Board (Beema Samiti) was established in 1992 A.D. under the Insurance Act 1992. Furthermore, after the restoration of democracy and economic liberalization in 1990 A.D., the insurance companies in Nepal started to flourish (Shrestha et. al., 2013). According to Beema Samiti, there are currently 39 insurance companies registered in Nepal. Among them 18 are life insurance companies, 20 are non-life insurance companies and one reinsurance company.

Premium is the most important source of revenue and income to the insurance companies. Hence, in course of achieving high level of revenue, the insurance companies are keen on identifying the elements that are crucial on improving the level of profitability. Every insurance companies are different from one-another in one way or the other. Financial performance is one of the different measures to evaluate how well a firm is using its resources to generate income. Good examples of financial performance include operating income, earnings before interest and taxes, and net asset value. Better financial performance is inevitable for continuous survival, growth and competitiveness the firms. It measures the financial soundness and health of the organization (Ngui, 2010).

Business executives use financial statements to draft a comprehensive financial plan that will maximize shareholders' wealth and minimize possible risks that may pre-exist. Financial statements are prepared and produced for external stakeholders like: shareholders, government agencies and lenders (Ramadan, 2010). Assessment of firm's performance should take into account many different measures as there are several factors that determine the performance of economic organization including asset base, leverage, performance of the loan book, corporate governance and quality

of staff and regulations in the industry. The essence of financial performance measurement is to provide the organization with the maximum return on the capital employed in the business (Ngui, 2010).

Insurers' profitability is influenced by both internal and external factors. Whereas internal factors focus on an insurer's specific characteristics, the external factors concern both industry features and macroeconomic variables. The profitability of insurance firms can also be appraised at the micro, meso and macro levels of the economy. The micro level refers to how firm-specific factors such as size, capital, efficiency, age, and ownership structure affect profitability. The meso and macro levels refer to the influence of support-institution and macroeconomic factors respectively. At micro level, profit is the essential pre-requisite for the survival, growth and competitiveness of insurance firms and the cheapest source of funds (Buyinza et. al., 2010).

The financial performance of companies is a subject that has attracted a lot of attention, comments and interests from both financial experts, researchers, the general public and the management of corporate entities. Yet, selecting out the most successful firms has always proved to be a difficult task to many as a firm may have a high level of profitability, but at the same time be in a very bad situation regarding its liquidity. The financial performance of a firm can be analysed in terms of profitability, dividend growth, sales turnover, asset base, capital employed among others. However, there is still debate among several disciplines regarding how the performance of firms should be measured that affect financial performance companies (Liargovas & Skandalis, 2008).

The performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation. Researchers in the strategic management field have offered a variety of models for analysing financial performance. However, little consensus has emerged on what constitutes a valid set of performance should include multiple criteria analysis.

This multidimensional view of performance implies that different models or patterns of relationship between corporate performance and its determinants will emerge to demonstrate the various sets of relationships between dependent and independent variables in the estimated models objectives to be achieved through that evaluation (Ostroff and Schmidt, 1993).

There is not much literature available about the study of determinants of profitability in Nepalese insurance sector. So, the objective of this study is to show the relationship between the firm-specific factors and financial performance of the insurance companies in Nepal and to study the scenario of the insurance companies in the Nepal. Hence, this study entirely focuses on identifying the firm-specific elements which are responsible for the change in profitability position of insurance company in Nepal.

1.2 Statement of the problem

Determination of insurance companies' profitability has attracted the attention of numerous researchers over the last decade. The reason behind this is the direct implication of the result to policyholders, shareholders, managers and other interested parties. However, in Nepal, only a few researches has been done in insurance sector and even few in determining the variables that affect the profitability of insurance companies. Some studies focused on macro element, some focused on specific type of insurance company. Hence, this study will cover the firm-specific factors that affect the profitability position of whole insurance industry.

Almajali et al. (2012) investigate the factors that mostly affect the financial performance. The study distinguished between financial and non-financial drivers of performance. The result of this study shows that Leverage, Liquidity, Age, Size and Management Competence significantly affecting the performance in Jordanian Insurance companies. The results indicate that great attention should be paid to leverage. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. So, insurers should be careful and more concerned on borrowing and debt department and at the same time. Liquidity: the insurance companies should

increase the current assets and decrease current liabilities as a liquidity is positively related to financial performance. Age: it has a good indication to new entrants to insurance industry that the age of the company has no influence on its good performance. Size is positive, so high consideration should be given to increase the company assets, because the size of the company is an important factor as it influences its competitive power. Small companies have less power than large ones; hence they may find it difficult to compete with the large firms particularly in highly competitive markets. Management should focus on employee's efficiency by choosing the employees who complete higher educations and are capable.

Gonga & Sasaka (2017) investigated the determinants that mostly affect the financial performance of insurance firms in Kenya. The study revealed that the size of the firm is a significant factor affecting the profitability of insurance firms. Moreover, the negative relationship had been established between value of gross premium and firms' profitability.

In Nepal, unlike to the good performance from banking sector, the insurance sector didn't react to the growth of Nepalese economy. The overall financial performance of insurance companies in Nepal is somehow weak except for some companies which accomplished some revenues. This study tries to investigate the weakness in the overall financial performance of insurance companies. Thus, to identify the factors that affects the profitability of insurance companies in Nepal, this study will seek the answer of following questions:

- 1) How is the financial performance of insurance companies in Nepal?
- 2) What is the effect of Leverage, Age, Size, Liquidity, and Growth of Premiums on Return on Assets?
- 3) What is the effect of Leverage, Age, Size, Liquidity, and Growth of Premiums on Return on Equity?

1.3 Purposes of the study

The main objective of this study is to identify the relationship between the firm-specific factors and their effect on profitability of insurance companies in Nepal. However, specific objectives had been broken down as follows:

- 1) To analyse the financial performance of insurance companies in Nepal.
- 2) To identify the effect of Leverage, Age, Size, Liquidity, Growth of premium on the ROA.
- 3) To examine the effect of Leverage, Age, Size, Liquidity, Growth of premium on the ROE.

1.4 Research hypothesis

The study has addressed following research hypotheses based on the prior empirical literature.

H₁: There is a positive relationship between Company Size and financial performance of insurance companies.

H₂: There is a positive relationship between Age of the firm and financial performance of insurance companies.

H₃: There is a negative relationship between leverage and financial performance of insurance companies.

H₄: There is a positive relationship between liquidity and financial performance of insurance companies.

H₅: There is a positive relationship between growth of premiums and financial performance of insurance companies.

1.5 Significance of the study

The main reason for this study is that the researchers have not paid enough attention to this subject in Nepal. Most of the studies previously focused on banks not on insurance companies as well as some focused on only analysis of financial

performance not on factors affecting financial performance. Therefore, this study drops light on the scarcity of these types of study in Nepal.

This study is expected to provide useful insight to the researchers, scholars and academicians about the existing relationship between the firm-specific determinants of financial profitability of insurance companies. This study adds the body of the knowledge in the finance discipline, and may also act as a source of reference in the future for academic and professional people, shareholders, investors, customers and other key stakeholders. It will be helpful to these insurance companies to identify its hidden weaknesses regarding financial performance. It will also add value to the policy-makers and regulators to have a bird-eye view of the insurance industry in Nepal. After the identification of elements that affect the financial health of the insurance companies, the regulatory body and the policy-makers may come up with suitable policies and regulations.

Moreover, the result of the study will also benefit to the insurance company itself. Since the study will be based on firm-specific determinants, it is more useful for the company to nourish the element that is contributing to their income and eliminating if not minimizing the elements that has inverse relationship with profitability.

Furthermore, this research will also be useful for the individuals, who are willing to invest their money in the insurance industry and are in dilemma on deciding which company to settle.

1.6 Limitation of the study

The limitations of the study are as follows:

- 1) The accuracy of result and conclusion highly depends upon the reliability of the secondary data.
- 2) Although there are several measures to measure the profitability, only ROA and ROE are taken by this study.
- 3) Among various statistical tools, only regression is used to identify the relationship between dependent and independent variables.

- 4) Among various firm-specific elements only age, size, liquidity, leverage and premium growth are taken for this study.
- 5) The study only covers the data of past seven years.
- 6) Only 8 out of 39 insurance companies are taken as sample for the study due to the problem of unavailability of required data.
- 7) This study is due with limited resources of time and the sample size taken.
- 8) The findings of this study may not be generalized to all insurance companies across the globe.

1.7 Organization of the study

The study has been organized into five chapters, each chapter deals with the specific aspects of the study, which are as follows:

Chapter I: Introduction

This chapter provides a general introduction to the study. It contains background of the study, statement of the problems, objective of the study, conceptual framework, research hypotheses, significance of the study and limitation of the study.

Chapter II: Literature review

The second chapter presents the theoretical analysis, review of the related and pertinent literature available. It includes a discussion on the review of related studies highlighting on its relevant findings and research gap.

Chapter III: Methodology

This chapter describes the methodology employed in preparing this study. It deals with research design, nature and source of data, population and sample, and method of data analysis, analysis plan and specification models for the study and operational definition of measurement variables. It briefly mentions the data collection and analysis technique and inherent limitation of such technique.

Chapter IV: Results

This chapter of study illustrates the collected data into a systematic format. The interpretation and analysis of data has been done in this section. This chapter presents the results and findings obtained from panel data; both descriptive statistics and inferential statistics have been employed specifically using correlation, ANOVA, regression and hypothesis test to establish the significance of the model and conclude the major findings of the study.

Chapter V: Conclusions

Last chapter presents summary, conclusion and recommendation of the study. This section incorporates an outlet for future research with the scope of the future studies in the same field. References and appendices are included at the end of the study.

CHAPTER - II

LITERATURE REVIEW

This chapter deals with some empirical and theoretical review of literature that provides conceptual framework associated with the firm-specific factors affecting financial performance of insurance companies of Nepal. This chapter has been classified into four sections. Theoretical review of study has been discussed on first section, second section presents review of empirical studies, research gap of the subject under study has been presented on third section and finally to visualize the conceptual relationship between dependent and independent variables conceptual framework has been presented on forth chapter.

With the research problem on hand, we have to study about the works and contribution made by previous scholars and researchers about the subject under study. This is the time consuming but crucial and worthy section of a research. This chapter helps to receive some idea for developing a research design, to identify whether this study can make any contribution on literature and add some body of knowledge. "Review of literature helps you to develop a thorough understanding and insight into previous research works that relates to your study. It is also a way to avoid investigating problems that have already been definitely answered."(Pant, 2016)

(Haywood & wragg, 1996) state that a literature review is a process of locating, obtaining, reading, and evaluating the research literature in the area of our interest. Hence, from the above sayings, we can conclude that review of literature is a continuity of research that is ensured by linking our study with the past research studies. It also avoids the needless duplication of the efforts. Literature review shows our readers that we have an in-depth grasp of the subject matter; and that we understand where our research fits into and adds to an existing body of agreed knowledge.

2.1 Theoretical review

2.1.1 History of insurance companies in Nepal

The financial system in Nepal doesn't have a long history. In 1880, TejarthAdda (The National Treasury Office), the first financial institution, was established by the initiation of the then prime minister Ranodweep Singh. It was used as the government bank and ministry of finance by Rana rulers. Later, with the establishment of Nepal Bank Limited (NBL) in 1937, general public were offered with various financial services. Till that date, there had not been any insurance companies operating in Nepal. In those days, foreign (mostly Indian) insurance companies met the insurance need of Nepal. After 10 years of establishment of NBL, Nepal Insurance and Transport Company was established in 1947 as a subsidiary company of NBL. It was the only national insurance concern in Nepal before establishment of Rastriya Beema Sansthan (RBS) in 1968 (Shrestha et. al., 2013).

After the establishment of RBS, the then main business holder of life portfolio, Life Insurance Corporation of India transferred the business to RBS and closed its office in Nepal in 1972. None the less, non-life companies are in operation till to date. In 1968 Rastriya Beema Sansthan (RBS) was established under company Act, 2024 and was converted into corporation in the following year under Rastriya Beema Sansthan Act, 1969. This is a government owned organization even now, and has been operating both life and non-life insurance business. Prior to the enactment of insurance Act, 1968 there was no regulatory body that supervises insurance business in the country. Under the insurance Act, 1968, Beema Samiti (Insurance Board) was formulated as the insurance supervisory Authority (Shrestha et.al, 2013).

In 1968, Nepalese insurance scenario experienced a new experiment by licensing a joint venture insurance company to operate both life and non-life insurance policies. But the real expansion took place from 1990s following the financial sector reform and liberalization of the economy by the government. The new reform and policy enhanced the involvement and growth of insurance business in the private sector. As a result, many companies and even the branches of Indian and US companies came into the scene in the private sector including foreign equity. The number of insurance

companies including RBS reached 39 by the end of F.Y.2017/18. Among them, 18 are life insurance companies, 20 are non-life insurance companies and one reinsurance company (Shrestha et. al., 2013).

Liberalized economic policy and the priority given to the privatization by government of Nepal added extra energy to develop insurance industry in Nepal. Various development projects, increasing number of domestic airlines operating their services in Nepal has also helped extending the insurance market in Nepal. Many new emerging second generation non-life insurance companies like - Alliance Insurance Company, Premier Insurance Company, Himalayan General Insurance Company, United Insurance Company, Sagarmatha Insurance Company etc. developed. The insurance committee (Beema Samiti) made provision to separate life insurance for non-life insurance companies. Then, again a number of life insurance companies like Nepal Life Insurance Company, Life Insurance Company of Nepal; American Life Insurance Company etc. developed and operated insurance business in the country. Insurances companies in the nation's financial systems have been able to mobilize the funds in developing sectors. In non-life insurance companies, broad area of services covered are fire insurance, marine insurance, engineering and contract insurance, air insurance and miscellaneous insurance that include theft insurance, crop insurance, earthquake insurance and so on (Shrestha et.al, 2013).

2.1.2 Learning Curve Theory

Learning curve also known as experience curve is a concept that graphically shows the relationship between cost and output over a defined period of time. The learning curve theory states that through the repetitive number of trails or observations and body of knowledge learned over time, a person or an organisation tend to perform better. The more the learning and experience the better one does on something. The first person to describe the learning curve was Hermann Ebbinghaus in 1885, in the field of psychology of learning. Later in 1936, Theodore Paul Wright described the effect of learning on production cost in the aircraft industry.

The main idea behind learning curve is that, any employee, regardless of position, takes time to learn how to carry out a specific task or duty. Then, as the task is repeated number of times, an employee learns how to perform it quickly through reducing the wastages and the time required producing one unit of output.

2.1.3 Capital Structure Theory

Capital structure is the mix of owner- supplied capital (equity, reserve and surplus) and borrowed capital (bonds, debentures and loans) that a firm uses to finance business operation. Whether to finance through debt, equity or a combination of both depend on various factors. These include business risk, management style, control, exposure to taxes, financial flexibility and market condition. Every corporate organisation tries to minimize cost of funds (Weighted Average Cost of Capital- WACC) and to maximize the value of firm. So, in order to know the relationship between leverage and value of fund, various theories had been brought forward. However, there still exists contradiction whether capital structure is relevant or irrelevant.

According to Net Income Approach, there is a direct relationship between capital structure and value of the firm. Since, we can deduct on the corporate taxes, debt becomes cheaper source of fund. Therefore, using more debt makes the cost of capital lower given that earnings remains constant and decrease in WACC ups the company's Value.

Another Theory that came to counter Net Income Approach is Net Operating Income Approach. This theory argues about the irrelevance of capital structure on firm's value. This approach proposes that the use of more debt, raises the risk of shareholders. In effect, the increase in shareholders' risk increases the cost of equity which offsets the advantages gained from using the cheaper cost of debt, which in-turn makes the Weighted Average Cost of Capital constant.

Similarly, Traditional Approach of capital structure assumes the capital structure as relevant matter for the value and cost of capital of firm. It is the intermediate approach as it strikes as a balance between earlier described two approaches of capital structure.

According to this approach, there is an optimal level of capital structure; therefore, the firm can increase the total value of the firm through the wise use of leverage. The firm initially can lower its overall cost of capital through the use of cheapest cost of debt and raise its total value through leverage. But, the increase in leverage increases the risk to debt holders and the debt holders demand high interest rate as a result the overall cost of capital also increases.

Later, Modigliani and Miller (1958) joined the race and they brought forward two pro-positions about capital structure and their relevance to the value of firm. On the first position under no tax condition, they argued that the cost of debt and overall cost of capital are constant regardless of a firm's leverage position, measured as a firm's debt-to-equity ratio. As a firm increases its relative debt level, the cost of equity capital increases, reflecting the higher return required by stockholders due to increased risk exposed by additional debt. The increased cost of equity exactly offsets the benefit of the lower cost of debts.

On second position, with existence of corporate and personal taxes, they elude taxation at the corporate level on debt are tax deductible, whereas dividend or retained earnings associated with stock are not deductible by the corporation for tax purposes. Consequently, the total amount of payments available for both debt holders and equity holders is greater if the level of debt employment is greater. But, the presence of taxes on personal income may reduce or possibly eliminate the corporate tax advantage associated with debt. If returns on debt and stock are taxed at the same personal tax rate, however, the corporate tax advantage remains.

2.1.4 Pecking Order Theory

Pecking order theory is also known as a ladder or class structure of financing. As suggested by Myres and Majluf (1984), the first preference is given to the internal financing because it avoids the outside scrutiny of supplier of capital and floatation cost. The next preference is given to the straight debt as it is the cheapest source of external capital. Furthermore, debts result in less intrusion into management by

supplier of capital and floatation costs are also less than other source of external financing.

Next, in the order is the hybrid security, which has some features of debt and some features of equity – like preference share, convertible bonds. Finally, least desirable source of financing is straight equity because it is the expensive source of financing with relatively higher floatation cost. Moreover, its interference in management and control is also significant.

Hence, pecking order theory states the preference that should be made upon the need of additional financing. So, it is considered as the preference theory. It is a behavioural explanation of why certain companies finance the way they do.

2.1.5 Theory of Economies of Scale

In microeconomics, economies of scale are the cost advantages that enterprises obtain due to size, output or scale of operation, with cost per unit of output generally decreasing with increasing scale as fixed costs are spread out over more units of output. Often operational efficiency is also greater with increasing scale, leading to lower variable cost as well. Economies of scale apply to a variety of organizational and business situations and at various levels, such as a business or manufacturing unit, plant or an entire enterprise. For example, a large manufacturing facility would be expected to have a lower cost per unit of output than a smaller facility, all other factors being equal, while a company with many facilities should have a cost advantage over a competitor with fewer resources (Moore, 1959).

Large producers are usually efficient at long runs of a particular product grade. However, they find it costly to switch to other product varieties frequently. They will therefore result in avoiding specialty grades even though they have higher margins. Hence, smaller (usually older) can switch their product from one variety to another with ease.

2.2 Review of empirical studies

There have been various studies on the relationship between various factors and their effect on financial performance of banking and life insurance industries. These studies had added the body of knowledge on the subject matter. Various studies have difference on variables, methodology, samples and conclusion.

(Gonga & Sasaka, 2017) investigated the determinants of financial performance of insurance firms in Kenya. They use descriptive statistics through primary and secondary data with SPSS. The study revealed that most of the insurance firms in Kenya relied on cash-flow from operation for liquidity management. It also concluded that the size of the firm is a significant factor affecting profitability of insurance firms. The study indicated that the profitability of insurance companies has positive relationship with size of the firm and has negative relationship with growth of premium.

Shala et. al., (2014) investigated the factors affecting profitability of insurance companies in Kosovo for the period from 2009 to 2012 of 11 insurance companies. The study adopted longitudinal time dimension with panel method and ordinary least square regression. In the study, size, growth, life expectancy, age, fixed assets ratio, liquidity, leverage and size of capital were selected as independent variables to know their impact on ROA. To study the relationship, the financial statements of these companies were collected and analysed using secondary data. The result showed that the ratio of the volume of liquidity and capital are significantly and positively related to acquisition. In contrast, the size of the company and the ratio of fixed assets showed a significant but negative relationship with corporate profitability.

Another study conducted by Kaya (2015), analysed the effect of firm-specific factors on the profitability of non-life insurance companies in Turkey. For this purpose, the researcher took the sample of 24 non-life insurance firms operating in Turkey and uses the data from 2006-2013. The main finding of the study demonstrated that the profitability of the non-life insurance companies is significantly and positively related to the size of the company and growth in premium. Whereas, it also showed the age of

the company and current ratio are statistically significant and negatively related to the profitability of the non-life insurance companies in Turkey.

Batchineg (2017) examined the effect of firm specific factors on the profitability of the organization in Mongolian companies. Total of 13 indicators; growth on sales, growth on assets, earning per share, gross profit margin, cost to revenue ratio, return on cost, short-term debt to assets ratio, current assets to total assets ratio, long-term debt to total assets ratio quick ratio, current ratio and cash ratio were used as explanatory variables and return on assets (ROA), return on equity (ROE) and return on sales (ROS) were chosen as profitability indicator. The data of 100 Mongolian Joint Stock companies' financial statements for 4 years were obtained through secondary source. The data analysis has been done through panel regression on R statistical system. The study showed that out of 13 independent variables growth in profit, quick ratio, current ratio, growth in assets, were insignificant factors. It showed that liquidity and growth cannot express financial performance. In contrast, return on cost, EPS, short-term debt to total assets ratio and long-term debt to total assets ratio showed significant relationship with the profitability of Mongolian firms.

Wanjugu (2014) conducted a research on identifying the relationship between various firm-specific factors affecting profitability of insurance company in Kenya. Altogether 23 samples were taken for this research. The study concludes that the profitability of general insurers in Kenya is positively and significantly influenced by leverage and equity capital. Size of the firm, as measured in total assets and ownership structure had a negative and significant effect on performance of general insurers in Kenya. Further, at 5% level of significance, liquidity has a negative and marginally significant effect on performance of general insurers in Kenya.

Khan (2015) aimed to study the effects of the financial crisis of 2008 on the non-life insurance industry and to determine which variables influence the profitability of nonlife insurers in Portugal, for the period between 2004 and 2013. To accomplish that, the financial statements of the non-life insurance industry has been analysed through two linear regressions to study the variables that explain the behaviour of the financial performance. The data required for the study were collected in the ASF —

Autoridade de Supervisao de Seguros e Fundos de Pensoes. The method chosen for the results of the multiple regressions was the random effects on ROA—Return on Assets—and fixed effects for the ROE—Return on Equity—through Gretl. The sample included 150 observations of 15 non-life insurers, through a time horizon of 10 years. The results confirmed that the financial structure of the non-life insurance companies in Portugal was rock solid, and that the chosen independent variables behaved according to what would be expected. According to the final results, the determinants of the financial performance in the Portuguese non-life insurance market are company age, premium growth, loss ratio, tangibility and management competence index. In face of the results, Portuguese non-life insurance companies look with particular attention to premium growth, age, loss ratio, tangibility and management competence index, because those are variables have significant effects on the performance. The insurance companies should improve the growth of premiums in order to obtain additional market share." It is essential to understand the dynamics of the loss ratio in particular, the importance of imposing premiums that covers the risks assumed, not yielding to fierce competition policies with a strong destructive potential. Insurance companies must have aligned enhancers and human resources policies with the strategy, because the knowledge and competence of human resources are decisive factors for performance" (Khan, 2015).

Ansari & Wubshet (2014) conducted a study on financial soundness and performance of life insurance companies in India. They concluded that there is a significant difference between capital adequacy, management efficiency, assets quality, earning profitability and liquidity position in private and public life insurance companies. Ghimire & Kumar (2014) had also studied the financial soundness and performance of insurance companies by CAMEL model in Nepal during 2007/08 to 2011/12. The study highlighted that most of the CAMEL indicators are improving, such as a good position in capital adequacy. However, there is a decreasing trend in ROE which would discourage investor in the future.

Daare (2016) took a study with the objective to identify the factors that determine the non-life insurance companies' profitability in India. To achieve the objective, financial report of eight general insurance companies (2 public and 6 private

companies) were collected purposively from the year 2006 to 2016 with 80 observations. Liquidity, Age of the insurance company, Size of total assets, Capital adequacy, Premium growth, Loss ratio, Gross Domestic Product (GDP) and Inflation rate are considered independent variables to study their impact on Return on Assets (ROA). The relationship has been analysed using multiple regression on coefficient of R-square. Though the author tested eight variables, company size, liquidity and inflation found statistically significant factors that determine insurance companies' profitability in India. The study recommended insurance managers to put significant attention on managing current assets and current liability to maintain optimal liquidity position while inflation was also considered important from external variables.

Khandoker et. al (2013) examined the determinants of the profitability of firms in the Non-Banking Financial Institution (NBFIs) industry of Bangladesh. Investigators considered Total Assets, Total Liabilities, Total Equity, Term Deposits, Operating Revenue and Operating Expense as explanatory variables to study their effect on Net Profit. The data for this study were gathered from the audited annual financial report published by the listed 22 companies. The annual data for the all listed NBFIs during 2008 to 2011 are used in order to assess the profitability of the financial institution of Bangladesh. Through Statistical Package for Social Sciences (SPSS), various descriptive and inferential statistics including frequency distribution, measures of central tendency and dispersion, time series analysis, simple correlation and regression analysis and correlation matrix were used to analyse the relationship between independent and dependent variables. The study concluded that the selected profitability determinants have impact upon net profit, but among the independent variables the Total Asset, Term Deposit, Operating Revenue, Operating Expense significantly manipulated the Profitability of Non-Banking sector in Bangladesh. The results of multiple regressions suggested that the selected independent variables explain more than 98.30% changes in the net profit. By analysing the other statistical results of multiple regressions, the researchers found that the results are very much consistent with the simple regression. All the results were statistically significant and overall provide an idea that liquidity is the basic determinant of profitability in NBFIs sector.

Wolde (2016) conducted a study with an objective to figure out the factors affecting profitability of insurance companies in Ethiopia. In order to achieve this objective, this study used quantitative research approach using Panel data covering ten-year period from 2006–2015 for nine insurance companies. The investigator grouped independent variables into firm-specific, industry-specific and macroeconomic level. Size of company, leverage, loss ratio, reinsurance dependence and motor insurance were considered as firm-specific factors, market share was to represent industry-specific factor and real GDP and inflation were included on macroeconomic level. The study used linear regression model to see the effect of independent variables, which were the factors under study, on dependent variable, profitability proxied by ROA. The findings of the study showed that Size of company, Loss ratio and leverage have statistically significant relationship with insurers' profitability. However, reinsurance dependence has negative but insignificant relationship with profitability. On the other hand, variables like Motor insurance, market share have positive and statistically insignificant relationship with insurers' profitability. Economic growth rate and inflation have negative and insignificant influence on profitability. The study provides evidence that company size, Loss ratio, and Leverage are most important factors affecting profitability of insurance companies in Ethiopia. Therefore; the study recommends that Ethiopian insurance companies should give due consideration to these factors to appropriately address profitability issues.

While reviewing various literatures, it has been found that company's size of assets is also considered as a major influential factor that is positively related to financial performance. This is because life insurance companies with large size of assets have greater incentive dealing with adverse market fluctuations than smaller life insurance companies. Large life insurance companies are not only able to easily recruit employees with professional knowledge compared to smaller life insurance companies, they are also able to utilize economies of scale in terms of the labour cost and technologically advanced equipment. So, it is the most significant production factor for delivering insurance services.

The results of bidirectional long-run and short-run causal relationship between firm size and profitability showed that increased firm size can enhance firm profitability in

Nigeria. Likewise, increased firm's profitability can lead to increased firm size. This implies that greater attention to efficiently managing firms' size to optimal level will impact positively on the optimal level of profit. In the same way, efficient management of the firms to achieve high profit level will impact positively on firms' size in Nigeria (Akinlo, 2008).

Similarly, Kartikasari & Merianti (2011) argue that a negative relation between total assets and profitability of firms is logically accepted because ROA's denominator is total assets, thus the more total assets held by a company, the lower ROA it scores assuming constant net income. They further added that other factors contribute more dominantly to profitability than sales, such factor as expenses, costs, assets, and non-operating revenues or loss, thus relationship between sales and profitability becomes too weak to be recognized.

Dogan (2013) carried out a study to investigate the effect of firm size on profitability. On that study, data of 200 companies which were active in Istanbul Stock Exchange (ISE) between the years 2008-2011 had been used. Return on Assets (ROA) had been used as indicators of firm profitability and total assets, total sales and number of employees have been used as indicators of size. Multiple regression and correlation methods had been used in empirical analyses. The result of analysis indicated a positive relation between size indicators and profitability of firms. Control variables as the age of the firms and leverage rate had been found in a negative relation with ROA, but liquidity rate and ROA had been determined to have a positive relation.

John & Adebayo (2013) investigated the effect of firm size on profitability with the evidence from Nigerian manufacturing sector. For the study, panel data set over the period of 2005-2012 was obtained from the audited annual reports of the selected manufacturing firms listed in the Stock Exchange. Return on assets (ROA) was used as a proxy for profitability while log of total assets and log of turnover were used as proxies for firm size. Furthermore, liquidity, leverage and the ratio of inventories to total assets were used as the control variables. The results of the study revealed that firm size, both in terms of total assets and in terms of total sales, has a positive effect on the profitability of Nigerian manufacturing companies. Meanwhile, on the control

variables, a negative relationship with inventory was obtained while others have positive relationship.

Niresh & Velnampy (2014) analysed the relationship between firm size and profitability of listed manufacturing firms in Sri Lanka. With the purpose to explore the effects of firm size on profitability of quoted manufacturing firms in Sri Lanka, the data of 15 companies which were active in Colombo Stock Exchange (CSE) between the years 2008 to 2012 had been used. As indicators of firm profitability, return on assets and net profit had been used whereas total assets and total sales had been utilized as indicators of firm size. Correlation and regression methods had been used in the empirical analysis. The findings revealed no indicative relationship between firm size and profitability of listed manufacturing firms. In addition, the results showed that firm size has no profound impact on profitability of the listed manufacturing firms in Sri Lanka.

Similarly, as indicated by various literatures, the age of the company since establishment also has influential effect on the profitability of the firms. It is believed that with the long history of experience about product, market, trends, risks and various other factors; the old company has an incentive to reduce the operational expenditure and to tackle with undesirable market condition. The learning curve also known as experience curve suggests that, when the same tasks are repeated multiple number of trails or when a body of knowledge is learned over time it reduces the cost of production. According to Collins English Dictionary, "Learning curve is a process where people develop a skill from learning from their mistakes". It is so popular that it has been now considered as a grounded theory in economics and many other fields.

Selcuk (2016) conducted a study to determine whether the age of the firm explains the profitability of the firms or not. With an objective to investigate the impact of firm's age on the profitability of Turkish firms listed on Borsa Istanbul, a dataset covering the years between 2005 and 2014 were considered, consisting of 302 non-financial firms per year on the average were collected. Results reveal that there is a negative and convex relationship between firm age and profitability measured by return on assets, return on equity or gross profit margin. This suggests that the firms tend to

perform worse as they get older meaning that older firms perform poor than the younger firms. Hence, this study contradicts with the theory of learning curve.

Pervan et. al., (2017) also carried out a study to analyse the influence of age on firm performance. The study performs dynamic panel analysis based on a sample of 956 firms operating in Croatian food industry during the 2005-2014 period. The result of the analysis showed that age negatively affects firm's performance. As firms get older, benefits of their accumulated knowledge in all crucial aspects of the business (technology, supply channels, customers relations, human capital and financing costs) overcome with their inertia, inflexibility and ossesous by accumulated rules, routines and organizational structure.

Loderer & Waelchli (2010) examined the effect of age of the firm on its performance. In order to identify the relationship, the researchers studied 10,930 listed firms from the year 1978 to 2004. To analyse the statistics regression method had been used to show the relationship of firm's age on profit margin and return on assets. The study resulted highly significant negative relation between corporate age and firm's profitability. Loderer & Waelchli state that corporate aging could reflect a cementation of organizational rigidities over time. Consistent with that, costs rise, growth slows, assets become obsolete, and investment and R&D activities decline. They further added older age could advance the diffusion of rent-seeking behaviour inside the firm. This hypothesis is supported by the poorer governance, larger boards, and higher CEO pay we observe in older firms. Overall, firms seem to face a real senescence problem.

2.3 Research gap

There are several studies which studied the impact of firm-specific, industry specific and macroeconomic on the profitability of insurance companies in different countries and different period of time. This chapter reviewed various literatures relevant to factors affecting the financial performance of insurance companies in Nepal. Ample researches on financial performance analysis, premium collection and investment pattern of insurance companies had been conducted on study of insurance companies.

It is very much essential to study in the context of Nepal whether these factors like leverage, age, size, liquidity and premium on growths have any relation with financial performance- or not? The studies on factors affecting the financial performance are limited in the context of Nepal. Since, most the researchers focus on banks and its performance, only few efforts have been made to examine the financial performance of insurance companies.

The study conducted by Loderer & Waelchli (2010), Selcuk (2016) and Pervan et. al., (2017) were consistent on the result that the corporate age of an organisation is negatively related with the financial performance of an organisation. But, Learning curve suggests us that, as the time passes the organisation learns the ways things are done, which increases the efficiency through reducing wastages that in-turn decreases the cost of operation, ultimately increasing profitability.

Akinlo (2008) argued about the relationship between firm size and profitability show that increased firm size can enhance firm profitability in Nigeria. Likewise, increased firm's profitability can lead to increased firm size. It is inconsistent with the study conducted by Kartikasari & Merianti (2011). They argue that a negative relation between total assets and profitability of firms is logically accepted because ROA's denominator is total assets. They further added that other factors contribute more dominantly to profitability than sales, such factor as expenses, costs, assets, and non-operating revenues or loss, thus relationship between sales and profitability becomes too weak to be recognized.

Similarly, there are various studies that considered all the factors comprising firm-specific and macroeconomic variables. However, this study entirely focuses only on the firm-specific variables affecting profitability of insurance companies, which believed to provide the precise definition on the relationship. Moreover, to identify the effect of these variables on the present scenario, this study tries to fill up the gaps created by the use of different methodology, samples, variables, duration till the study, various analytical tools and conclusion.

CHAPTER - II

LITERATURE REVIEW

This chapter deals with some empirical and theoretical review of literature that provides conceptual framework associated with the firm-specific factors affecting financial performance of insurance companies of Nepal. This chapter has been classified into four sections. Theoretical review of study has been discussed on first section, second section presents review of empirical studies, research gap of the subject under study has been presented on third section and finally to visualize the conceptual relationship between dependent and independent variables conceptual framework has been presented on forth chapter.

With the research problem on hand, we have to study about the works and contribution made by previous scholars and researchers about the subject under study. This is the time consuming but crucial and worthy section of a research. This chapter helps to receive some idea for developing a research design, to identify whether this study can make any contribution on literature and add some body of knowledge. "Review of literature helps you to develop a thorough understanding and insight into previous research works that relates to your study. It is also a way to avoid investigating problems that have already been definitely answered."(Pant, 2016)

(Haywood & wragg, 1996) state that a literature review is a process of locating, obtaining, reading, and evaluating the research literature in the area of our interest. Hence, from the above sayings, we can conclude that review of literature is a continuity of research that is ensured by linking our study with the past research studies. It also avoids the needless duplication of the efforts. Literature review shows our readers that we have an in-depth grasp of the subject matter; and that we understand where our research fits into and adds to an existing body of agreed knowledge.

2.1 Theoretical review

2.1.1 History of insurance companies in Nepal

The financial system in Nepal doesn't have a long history. In 1880, TejarthAdda (The National Treasury Office), the first financial institution, was established by the initiation of the then prime minister Ranodweep Singh. It was used as the government bank and ministry of finance by Rana rulers. Later, with the establishment of Nepal Bank Limited (NBL) in 1937, general public were offered with various financial services. Till that date, there had not been any insurance companies operating in Nepal. In those days, foreign (mostly Indian) insurance companies met the insurance need of Nepal. After 10 years of establishment of NBL, Nepal Insurance and Transport Company was established in 1947 as a subsidiary company of NBL. It was the only national insurance concern in Nepal before establishment of Rastriya Beema Sansthan (RBS) in 1968 (Shrestha et. al., 2013).

After the establishment of RBS, the then main business holder of life portfolio, Life Insurance Corporation of India transferred the business to RBS and closed its office in Nepal in 1972. None the less, non-life companies are in operation till to date. In 1968 Rastriya Beema Sansthan (RBS) was established under company Act, 2024 and was converted into corporation in the following year under Rastriya Beema Sansthan Act, 1969. This is a government owned organization even now, and has been operating both life and non-life insurance business. Prior to the enactment of insurance Act, 1968 there was no regulatory body that supervises insurance business in the country. Under the insurance Act, 1968, Beema Samiti (Insurance Board) was formulated as the insurance supervisory Authority (Shrestha et.al, 2013).

In 1968, Nepalese insurance scenario experienced a new experiment by licensing a joint venture insurance company to operate both life and non-life insurance policies. But the real expansion took place from 1990s following the financial sector reform and liberalization of the economy by the government. The new reform and policy enhanced the involvement and growth of insurance business in the private sector. As a result, many companies and even the branches of Indian and US companies came into the scene in the private sector including foreign equity. The number of insurance

companies including RBS reached 39 by the end of F.Y.2017/18. Among them, 18 are life insurance companies, 20 are non-life insurance companies and one reinsurance company (Shrestha et. al., 2013).

Liberalized economic policy and the priority given to the privatization by government of Nepal added extra energy to develop insurance industry in Nepal. Various development projects, increasing number of domestic airlines operating their services in Nepal has also helped extending the insurance market in Nepal. Many new emerging second generation non-life insurance companies like - Alliance Insurance Company, Premier Insurance Company, Himalayan General Insurance Company, United Insurance Company, Sagarmatha Insurance Company etc. developed. The insurance committee (Beema Samiti) made provision to separate life insurance for non-life insurance companies. Then, again a number of life insurance companies like Nepal Life Insurance Company, Life Insurance Company of Nepal; American Life Insurance Company etc. developed and operated insurance business in the country. Insurances companies in the nation's financial systems have been able to mobilize the funds in developing sectors. In non-life insurance companies, broad area of services covered are fire insurance, marine insurance, engineering and contract insurance, air insurance and miscellaneous insurance that include theft insurance, crop insurance, earthquake insurance and so on (Shrestha et.al, 2013).

2.1.2 Learning Curve Theory

Learning curve also known as experience curve is a concept that graphically shows the relationship between cost and output over a defined period of time. The learning curve theory states that through the repetitive number of trails or observations and body of knowledge learned over time, a person or an organisation tend to perform better. The more the learning and experience the better one does on something. The first person to describe the learning curve was Hermann Ebbinghaus in 1885, in the field of psychology of learning. Later in 1936, Theodore Paul Wright described the effect of learning on production cost in the aircraft industry.

The main idea behind learning curve is that, any employee, regardless of position, takes time to learn how to carry out a specific task or duty. Then, as the task is repeated number of times, an employee learns how to perform it quickly through reducing the wastages and the time required producing one unit of output.

2.1.3 Capital Structure Theory

Capital structure is the mix of owner- supplied capital (equity, reserve and surplus) and borrowed capital (bonds, debentures and loans) that a firm uses to finance business operation. Whether to finance through debt, equity or a combination of both depend on various factors. These include business risk, management style, control, exposure to taxes, financial flexibility and market condition. Every corporate organisation tries to minimize cost of funds (Weighted Average Cost of Capital- WACC) and to maximize the value of firm. So, in order to know the relationship between leverage and value of fund, various theories had been brought forward. However, there still exists contradiction whether capital structure is relevant or irrelevant.

According to Net Income Approach, there is a direct relationship between capital structure and value of the firm. Since, we can deduct on the corporate taxes, debt becomes cheaper source of fund. Therefore, using more debt makes the cost of capital lower given that earnings remains constant and decrease in WACC ups the company's Value.

Another Theory that came to counter Net Income Approach is Net Operating Income Approach. This theory argues about the irrelevance of capital structure on firm's value. This approach proposes that the use of more debt, raises the risk of shareholders. In effect, the increase in shareholders' risk increases the cost of equity which offsets the advantages gained from using the cheaper cost of debt, which in-turn makes the Weighted Average Cost of Capital constant.

Similarly, Traditional Approach of capital structure assumes the capital structure as relevant matter for the value and cost of capital of firm. It is the intermediate approach as it strikes as a balance between earlier described two approaches of capital structure.

According to this approach, there is an optimal level of capital structure; therefore, the firm can increase the total value of the firm through the wise use of leverage. The firm initially can lower its overall cost of capital through the use of cheapest cost of debt and raise its total value through leverage. But, the increase in leverage increases the risk to debt holders and the debt holders demand high interest rate as a result the overall cost of capital also increases.

Later, Modigliani and Miller (1958) joined the race and they brought forward two pro-positions about capital structure and their relevance to the value of firm. On the first position under no tax condition, they argued that the cost of debt and overall cost of capital are constant regardless of a firm's leverage position, measured as a firm's debt-to-equity ratio. As a firm increases its relative debt level, the cost of equity capital increases, reflecting the higher return required by stockholders due to increased risk exposed by additional debt. The increased cost of equity exactly offsets the benefit of the lower cost of debts.

On second position, with existence of corporate and personal taxes, they elude taxation at the corporate level on debt are tax deductible, whereas dividend or retained earnings associated with stock are not deductible by the corporation for tax purposes. Consequently, the total amount of payments available for both debt holders and equity holders is greater if the level of debt employment is greater. But, the presence of taxes on personal income may reduce or possibly eliminate the corporate tax advantage associated with debt. If returns on debt and stock are taxed at the same personal tax rate, however, the corporate tax advantage remains.

2.1.4 Pecking Order Theory

Pecking order theory is also known as a ladder or class structure of financing. As suggested by Myres and Majluf (1984), the first preference is given to the internal financing because it avoids the outside scrutiny of supplier of capital and floatation cost. The next preference is given to the straight debt as it is the cheapest source of external capital. Furthermore, debts result in less intrusion into management by

supplier of capital and floatation costs are also less than other source of external financing.

Next, in the order is the hybrid security, which has some features of debt and some features of equity – like preference share, convertible bonds. Finally, least desirable source of financing is straight equity because it is the expensive source of financing with relatively higher floatation cost. Moreover, its interference in management and control is also significant.

Hence, pecking order theory states the preference that should be made upon the need of additional financing. So, it is considered as the preference theory. It is a behavioural explanation of why certain companies finance the way they do.

2.1.5 Theory of Economies of Scale

In microeconomics, economies of scale are the cost advantages that enterprises obtain due to size, output or scale of operation, with cost per unit of output generally decreasing with increasing scale as fixed costs are spread out over more units of output. Often operational efficiency is also greater with increasing scale, leading to lower variable cost as well. Economies of scale apply to a variety of organizational and business situations and at various levels, such as a business or manufacturing unit, plant or an entire enterprise. For example, a large manufacturing facility would be expected to have a lower cost per unit of output than a smaller facility, all other factors being equal, while a company with many facilities should have a cost advantage over a competitor with fewer resources (Moore, 1959).

Large producers are usually efficient at long runs of a particular product grade. However, they find it costly to switch to other product varieties frequently. They will therefore result in avoiding specialty grades even though they have higher margins. Hence, smaller (usually older) can switch their product from one variety to another with ease.

2.2 Review of empirical studies

There have been various studies on the relationship between various factors and their effect on financial performance of banking and life insurance industries. These studies had added the body of knowledge on the subject matter. Various studies have difference on variables, methodology, samples and conclusion.

(Gonga & Sasaka, 2017) investigated the determinants of financial performance of insurance firms in Kenya. They use descriptive statistics through primary and secondary data with SPSS. The study revealed that most of the insurance firms in Kenya relied on cash-flow from operation for liquidity management. It also concluded that the size of the firm is a significant factor affecting profitability of insurance firms. The study indicated that the profitability of insurance companies has positive relationship with size of the firm and has negative relationship with growth of premium.

Shala et. al., (2014) investigated the factors affecting profitability of insurance companies in Kosovo for the period from 2009 to 2012 of 11 insurance companies. The study adopted longitudinal time dimension with panel method and ordinary least square regression. In the study, size, growth, life expectancy, age, fixed assets ratio, liquidity, leverage and size of capital were selected as independent variables to know their impact on ROA. To study the relationship, the financial statements of these companies were collected and analysed using secondary data. The result showed that the ratio of the volume of liquidity and capital are significantly and positively related to acquisition. In contrast, the size of the company and the ratio of fixed assets showed a significant but negative relationship with corporate profitability.

Another study conducted by Kaya (2015), analysed the effect of firm-specific factors on the profitability of non-life insurance companies in Turkey. For this purpose, the researcher took the sample of 24 non-life insurance firms operating in Turkey and uses the data from 2006-2013. The main finding of the study demonstrated that the profitability of the non-life insurance companies is significantly and positively related to the size of the company and growth in premium. Whereas, it also showed the age of

the company and current ratio are statistically significant and negatively related to the profitability of the non-life insurance companies in Turkey.

Batchineg (2017) examined the effect of firm specific factors on the profitability of the organization in Mongolian companies. Total of 13 indicators; growth on sales, growth on assets, earning per share, gross profit margin, cost to revenue ratio, return on cost, short-term debt to assets ratio, current assets to total assets ratio, long-term debt to total assets ratio quick ratio, current ratio and cash ratio were used as explanatory variables and return on assets (ROA), return on equity (ROE) and return on sales (ROS) were chosen as profitability indicator. The data of 100 Mongolian Joint Stock companies' financial statements for 4 years were obtained through secondary source. The data analysis has been done through panel regression on R statistical system. The study showed that out of 13 independent variables growth in profit, quick ratio, current ratio, growth in assets, were insignificant factors. It showed that liquidity and growth cannot express financial performance. In contrast, return on cost, EPS, short-term debt to total assets ratio and long-term debt to total assets ratio showed significant relationship with the profitability of Mongolian firms.

Wanjugu (2014) conducted a research on identifying the relationship between various firm-specific factors affecting profitability of insurance company in Kenya. Altogether 23 samples were taken for this research. The study concludes that the profitability of general insurers in Kenya is positively and significantly influenced by leverage and equity capital. Size of the firm, as measured in total assets and ownership structure had a negative and significant effect on performance of general insurers in Kenya. Further, at 5% level of significance, liquidity has a negative and marginally significant effect on performance of general insurers in Kenya.

Khan (2015) aimed to study the effects of the financial crisis of 2008 on the non-life insurance industry and to determine which variables influence the profitability of nonlife insurers in Portugal, for the period between 2004 and 2013. To accomplish that, the financial statements of the non-life insurance industry has been analysed through two linear regressions to study the variables that explain the behaviour of the financial performance. The data required for the study were collected in the ASF —

Autoridade de Supervisao de Seguros e Fundos de Pensoes. The method chosen for the results of the multiple regressions was the random effects on ROA—Return on Assets—and fixed effects for the ROE—Return on Equity—through Gretl. The sample included 150 observations of 15 non-life insurers, through a time horizon of 10 years. The results confirmed that the financial structure of the non-life insurance companies in Portugal was rock solid, and that the chosen independent variables behaved according to what would be expected. According to the final results, the determinants of the financial performance in the Portuguese non-life insurance market are company age, premium growth, loss ratio, tangibility and management competence index. In face of the results, Portuguese non-life insurance companies look with particular attention to premium growth, age, loss ratio, tangibility and management competence index, because those are variables have significant effects on the performance. The insurance companies should improve the growth of premiums in order to obtain additional market share." It is essential to understand the dynamics of the loss ratio in particular, the importance of imposing premiums that covers the risks assumed, not yielding to fierce competition policies with a strong destructive potential. Insurance companies must have aligned enhancers and human resources policies with the strategy, because the knowledge and competence of human resources are decisive factors for performance" (Khan, 2015).

Ansari & Wubshet (2014) conducted a study on financial soundness and performance of life insurance companies in India. They concluded that there is a significant difference between capital adequacy, management efficiency, assets quality, earning profitability and liquidity position in private and public life insurance companies. Ghimire & Kumar (2014) had also studied the financial soundness and performance of insurance companies by CAMEL model in Nepal during 2007/08 to 2011/12. The study highlighted that most of the CAMEL indicators are improving, such as a good position in capital adequacy. However, there is a decreasing trend in ROE which would discourage investor in the future.

Daare (2016) took a study with the objective to identify the factors that determine the non-life insurance companies' profitability in India. To achieve the objective, financial report of eight general insurance companies (2 public and 6 private

companies) were collected purposively from the year 2006 to 2016 with 80 observations. Liquidity, Age of the insurance company, Size of total assets, Capital adequacy, Premium growth, Loss ratio, Gross Domestic Product (GDP) and Inflation rate are considered independent variables to study their impact on Return on Assets (ROA). The relationship has been analysed using multiple regression on coefficient of R-square. Though the author tested eight variables, company size, liquidity and inflation found statistically significant factors that determine insurance companies' profitability in India. The study recommended insurance managers to put significant attention on managing current assets and current liability to maintain optimal liquidity position while inflation was also considered important from external variables.

Khandoker et. al (2013) examined the determinants of the profitability of firms in the Non-Banking Financial Institution (NBFIs) industry of Bangladesh. Investigators considered Total Assets, Total Liabilities, Total Equity, Term Deposits, Operating Revenue and Operating Expense as explanatory variables to study their effect on Net Profit. The data for this study were gathered from the audited annual financial report published by the listed 22 companies. The annual data for the all listed NBFIs during 2008 to 2011 are used in order to assess the profitability of the financial institution of Bangladesh. Through Statistical Package for Social Sciences (SPSS), various descriptive and inferential statistics including frequency distribution, measures of central tendency and dispersion, time series analysis, simple correlation and regression analysis and correlation matrix were used to analyse the relationship between independent and dependent variables. The study concluded that the selected profitability determinants have impact upon net profit, but among the independent variables the Total Asset, Term Deposit, Operating Revenue, Operating Expense significantly manipulated the Profitability of Non-Banking sector in Bangladesh. The results of multiple regressions suggested that the selected independent variables explain more than 98.30% changes in the net profit. By analysing the other statistical results of multiple regressions, the researchers found that the results are very much consistent with the simple regression. All the results were statistically significant and overall provide an idea that liquidity is the basic determinant of profitability in NBFIs sector.

Wolde (2016) conducted a study with an objective to figure out the factors affecting profitability of insurance companies in Ethiopia. In order to achieve this objective, this study used quantitative research approach using Panel data covering ten-year period from 2006–2015 for nine insurance companies. The investigator grouped independent variables into firm-specific, industry-specific and macroeconomic level. Size of company, leverage, loss ratio, reinsurance dependence and motor insurance were considered as firm-specific factors, market share was to represent industry-specific factor and real GDP and inflation were included on macroeconomic level. The study used linear regression model to see the effect of independent variables, which were the factors under study, on dependent variable, profitability proxied by ROA. The findings of the study showed that Size of company, Loss ratio and leverage have statistically significant relationship with insurers' profitability. However, reinsurance dependence has negative but insignificant relationship with profitability. On the other hand, variables like Motor insurance, market share have positive and statistically insignificant relationship with insurers' profitability. Economic growth rate and inflation have negative and insignificant influence on profitability. The study provides evidence that company size, Loss ratio, and Leverage are most important factors affecting profitability of insurance companies in Ethiopia. Therefore; the study recommends that Ethiopian insurance companies should give due consideration to these factors to appropriately address profitability issues.

While reviewing various literatures, it has been found that company's size of assets is also considered as a major influential factor that is positively related to financial performance. This is because life insurance companies with large size of assets have greater incentive dealing with adverse market fluctuations than smaller life insurance companies. Large life insurance companies are not only able to easily recruit employees with professional knowledge compared to smaller life insurance companies, they are also able to utilize economies of scale in terms of the labour cost and technologically advanced equipment. So, it is the most significant production factor for delivering insurance services.

The results of bidirectional long-run and short-run causal relationship between firm size and profitability showed that increased firm size can enhance firm profitability in

Nigeria. Likewise, increased firm's profitability can lead to increased firm size. This implies that greater attention to efficiently managing firms' size to optimal level will impact positively on the optimal level of profit. In the same way, efficient management of the firms to achieve high profit level will impact positively on firms' size in Nigeria (Akinlo, 2008).

Similarly, Kartikasari & Merianti (2011) argue that a negative relation between total assets and profitability of firms is logically accepted because ROA's denominator is total assets, thus the more total assets held by a company, the lower ROA it scores assuming constant net income. They further added that other factors contribute more dominantly to profitability than sales, such factor as expenses, costs, assets, and non-operating revenues or loss, thus relationship between sales and profitability becomes too weak to be recognized.

Dogan (2013) carried out a study to investigate the effect of firm size on profitability. On that study, data of 200 companies which were active in Istanbul Stock Exchange (ISE) between the years 2008-2011 had been used. Return on Assets (ROA) had been used as indicators of firm profitability and total assets, total sales and number of employees have been used as indicators of size. Multiple regression and correlation methods had been used in empirical analyses. The result of analysis indicated a positive relation between size indicators and profitability of firms. Control variables as the age of the firms and leverage rate had been found in a negative relation with ROA, but liquidity rate and ROA had been determined to have a positive relation.

John & Adebayo (2013) investigated the effect of firm size on profitability with the evidence from Nigerian manufacturing sector. For the study, panel data set over the period of 2005-2012 was obtained from the audited annual reports of the selected manufacturing firms listed in the Stock Exchange. Return on assets (ROA) was used as a proxy for profitability while log of total assets and log of turnover were used as proxies for firm size. Furthermore, liquidity, leverage and the ratio of inventories to total assets were used as the control variables. The results of the study revealed that firm size, both in terms of total assets and in terms of total sales, has a positive effect on the profitability of Nigerian manufacturing companies. Meanwhile, on the control

variables, a negative relationship with inventory was obtained while others have positive relationship.

Niresh & Velnampy (2014) analysed the relationship between firm size and profitability of listed manufacturing firms in Sri Lanka. With the purpose to explore the effects of firm size on profitability of quoted manufacturing firms in Sri Lanka, the data of 15 companies which were active in Colombo Stock Exchange (CSE) between the years 2008 to 2012 had been used. As indicators of firm profitability, return on assets and net profit had been used whereas total assets and total sales had been utilized as indicators of firm size. Correlation and regression methods had been used in the empirical analysis. The findings revealed no indicative relationship between firm size and profitability of listed manufacturing firms. In addition, the results showed that firm size has no profound impact on profitability of the listed manufacturing firms in Sri Lanka.

Similarly, as indicated by various literatures, the age of the company since establishment also has influential effect on the profitability of the firms. It is believed that with the long history of experience about product, market, trends, risks and various other factors; the old company has an incentive to reduce the operational expenditure and to tackle with undesirable market condition. The learning curve also known as experience curve suggests that, when the same tasks are repeated multiple number of trails or when a body of knowledge is learned over time it reduces the cost of production. According to Collins English Dictionary, "Learning curve is a process where people develop a skill from learning from their mistakes". It is so popular that it has been now considered as a grounded theory in economics and many other fields.

Selcuk (2016) conducted a study to determine whether the age of the firm explains the profitability of the firms or not. With an objective to investigate the impact of firm's age on the profitability of Turkish firms listed on Borsa Istanbul, a dataset covering the years between 2005 and 2014 were considered, consisting of 302 non-financial firms per year on the average were collected. Results reveal that there is a negative and convex relationship between firm age and profitability measured by return on assets, return on equity or gross profit margin. This suggests that the firms tend to

perform worse as they get older meaning that older firms perform poor than the younger firms. Hence, this study contradicts with the theory of learning curve.

Pervan et. al., (2017) also carried out a study to analyse the influence of age on firm performance. The study performs dynamic panel analysis based on a sample of 956 firms operating in Croatian food industry during the 2005-2014 period. The result of the analysis showed that age negatively affects firm's performance. As firms get older, benefits of their accumulated knowledge in all crucial aspects of the business (technology, supply channels, customers relations, human capital and financing costs) overcome with their inertia, inflexibility and ossesous by accumulated rules, routines and organizational structure.

Loderer & Waelchli (2010) examined the effect of age of the firm on its performance. In order to identify the relationship, the researchers studied 10,930 listed firms from the year 1978 to 2004. To analyse the statistics regression method had been used to show the relationship of firm's age on profit margin and return on assets. The study resulted highly significant negative relation between corporate age and firm's profitability. Loderer & Waelchli state that corporate aging could reflect a cementation of organizational rigidities over time. Consistent with that, costs rise, growth slows, assets become obsolete, and investment and R&D activities decline. They further added older age could advance the diffusion of rent-seeking behaviour inside the firm. This hypothesis is supported by the poorer governance, larger boards, and higher CEO pay we observe in older firms. Overall, firms seem to face a real senescence problem.

2.3 Research gap

There are several studies which studied the impact of firm-specific, industry specific and macroeconomic on the profitability of insurance companies in different countries and different period of time. This chapter reviewed various literatures relevant to factors affecting the financial performance of insurance companies in Nepal. Ample researches on financial performance analysis, premium collection and investment pattern of insurance companies had been conducted on study of insurance companies.

It is very much essential to study in the context of Nepal whether these factors like leverage, age, size, liquidity and premium on growths have any relation with financial performance- or not? The studies on factors affecting the financial performance are limited in the context of Nepal. Since, most the researchers focus on banks and its performance, only few efforts have been made to examine the financial performance of insurance companies.

The study conducted by Loderer & Waelchli (2010), Selcuk (2016) and Pervan et. al., (2017) were consistent on the result that the corporate age of an organisation is negatively related with the financial performance of an organisation. But, Learning curve suggests us that, as the time passes the organisation learns the ways things are done, which increases the efficiency through reducing wastages that in-turn decreases the cost of operation, ultimately increasing profitability.

Akinlo (2008) argued about the relationship between firm size and profitability show that increased firm size can enhance firm profitability in Nigeria. Likewise, increased firm's profitability can lead to increased firm size. It is inconsistent with the study conducted by Kartikasari & Merianti (2011). They argue that a negative relation between total assets and profitability of firms is logically accepted because ROA's denominator is total assets. They further added that other factors contribute more dominantly to profitability than sales, such factor as expenses, costs, assets, and non-operating revenues or loss, thus relationship between sales and profitability becomes too weak to be recognized.

Similarly, there are various studies that considered all the factors comprising firm-specific and macroeconomic variables. However, this study entirely focuses only on the firm-specific variables affecting profitability of insurance companies, which believed to provide the precise definition on the relationship. Moreover, to identify the effect of these variables on the present scenario, this study tries to fill up the gaps created by the use of different methodology, samples, variables, duration till the study, various analytical tools and conclusion.

CHAPTER - IV

RESULTS

This chapter deal with the results of the study which include descriptive statistics of variables, correlation results for dependent and explanatory variables, regression analysis for profitability measures in terms of ROA and ROE and hypothesis test to establish the significance of the model and conclude the major findings of the study. The data analysis was done by using SPSS software. It provides the systematic and organized presentation and analysis of data that will put leverage, age, size, liquidity and growth of the premium on financial performance of insurance companies in Nepal. Finally, the results of the regression analysis are discussed by supporting empirical evidence. Hence, the systematic and orderly interpretations and analysis of findings are discussed in this chapter.

The data for this study was obtained from published financial reports of the selected Insurance companies in the sample, Insurance Board Supervision Report and Insurance Board financial statistics.

4.1 Descriptive statistics

Descriptive statistics is the discipline of quantitatively describing the main features of a collection of data. Descriptive statistics provides simple summary about the sample and about the observations that have been made. The table 4.1 presents the descriptive statistics for dependent variables i.e. Return on assets (in percent), Return on equity (in Percent) and the independent variables: leverage (in percent), age of company (years), size of company (on logarithm of total assets, in numbers), liquidity (in ratio of current assets to current liabilities) and growth on premium (in percent). N is the number of observations.

The descriptive statistics used in this study consists of mean, standard deviation, minimum and maximum values associated with variables under consideration. Table 4.1 summarizes the descriptive statistics of dependent and independent variables used in this study during the period 2010/11 through 2016/17 associated with 8 samples

insurance companies of Nepal. Thus, the total observations for each variable are 56 (panel data of 8 Insurance companies for 7 years)

Table 4.1: Descriptive Statistics of Selected Nepalese Insurance companies

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
SIZE	56	8.37	10.71	9.23	.499
AGE	56	4.00	24.00	14.63	5.861
LEVERAGE	56	9.00	97.00	62.45	18.007
LIQUIDITY	56	.07	15.64	3.65	4.058
PREMIUM GROWTH	56	-64.24	124.19	29.04	32.086
ROE	56	-58.69	85.16	16.25	17.734
ROA	56	-8.53	20.95	5.87	4.711

Source: SPSS output result outcome

The average percentage value of return on assets for the sample of Nepalese insurance companies comprise of mean 5.87 with a maximum and minimum value of 20.95 and -8.53percentage respectively. The standard deviation is 4.711 percentages from the average value. On the other hand, the average value of the sample insurance companies' return on equity is 16.25 percent and the maximum and minimum value of 85.16 to -58.69 percentages respectively. The standard deviation is 17.734 percentages from the average value.

By comparing the two proxies of financial performance measures, it seems the sample insurance companies are relatively doing better on the ROE performance measure than ROA. The mean value of ROE is 17.734 percent, whereas ROA is 5.87 percent, indicating that the sample insurance companies are doing better in utilizing shareholders' equity capital. From the two proxies of financial performance, table 4.1 shows ROE is first and ROA is the last, when they are ranked from the highest to the lowest value in terms of their mean values. On the bases of standard deviation from the mean, ROE shows higher standard deviation i.e. 17.334. However, the deviation of ROA is only 4.711, which is low in comparison with ROE. It shows that the fluctuation from mean value of ROE is higher and inconsistent than ROA. Hence, the

two proxies of financial performance do not show the superiority of particular measure in different aspects of descriptive statistics.

The firm size varies from minimum of 8.37 leading to the maximum 10.71 with the average of 9.23. The firm size also has minimal 0.499 of standard deviation from mean value. Likewise, the age of the insurance companies varies from a newest insurance company established before 4 years to the oldest 24 years leading to an average of 14.63 years. The leverage ratio signifying the ratio of total liabilities to total assets, have minimum value of 9 percent to the maximum value of 97 percent. The average percentage of leverage of selected insurance firms in Nepal is 62.45 percent. Liquidity varies from the minimum value of 0.07 times to maximum 15.64 times leading to average of 3.65 and the variation from mean value is 4.058. Similarly, the growth of the net premium is found to be minimum of -64.24 percent and maximum of 124.19percent with average of 29.04 percent and have a standard deviation of 38.086.

The variation as indicated by SD is largest for premium growth and lowest for size of the company.

4.2 Correlation Analysis

Correlation shows the strength of a relationship between two variables. It shows the extent and direction of the linear relationship between financial performance of insurance companies and firm-specific factors affecting it. The value of -1.00 represents perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A value of 0.00 means that there is no relationship between the variables tested. The Pearson's coefficients of dependent and independent variables have been computed and the results are presented in table 4.2.

The table 4.2 presents the matrix of Bi-variate Pearson correlation coefficients between dependent variables and independent variables. The correlation coefficients are based on the data from 8 sample insurance companies with 56 observations for the period 2010/11 through 2016/17. Return on assets (ROA in percent) and return on equity (ROE in percent) are considered as dependent variables. Leverage (LV in percent), age of company (AG in years), size of company (SZ- in logarithm of total

assets), liquidity (LQ in percent) and premium on growths (PG in percent) are independent variables.

Table 4.2: Pearson's correlation coefficient for dependent and independent variables.

Correlations								
		SZ	AG	LV	LQ	PG	ROE	ROA
SZ	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	56						
AG	Pearson Correlation	-.050	1					
	Sig. (2-tailed)	.716						
	N	56	56					
LV	Pearson Correlation	.657**	-.104	1				
	Sig. (2-tailed)	.000	.446					
	N	56	56	56				
LQ	Pearson Correlation	.538**	-.430**	.335*	1			
	Sig. (2-tailed)	.000	.001	.012				
	N	56	56	56	56			
PG	Pearson Correlation	.125	-.242	-.251	.168	1		
	Sig. (2-tailed)	.359	.072	.062	.216			
	N	56	56	56	56	56		
ROE	Pearson Correlation	.271*	.157	.075	-.118	.044	1	
	Sig. (2-tailed)	.043	.247	.581	.386	.746		
	N	56	56	56	56	56	56	
ROA	Pearson Correlation	-.248	.385**	-.614**	-.465**	.138	.543**	1
	Sig. (2-tailed)	.065	.003	.000	.000	.312	.000	
	N	56	56	56	56	56	56	56
** . Correlation is significant at the 0.01 level (2-tailed).								
* . Correlation is significant at the 0.05 level (2-tailed).								

Source: SPSS outcomeresult

The table 4.2 show that firm size (SZ) is negatively related to return on assets (ROA) with $-.248$, but is insignificant. It indicates that an increase in firm size leads to decrease in return on assets. The correlation coefficient between age of the company (AG) and ROA is $.385$ which is statistically significant at 1% level of significance. This shows us that the older the firm higher will be the ROA and vice-versa. Likewise, leverage (LV) and liquidity(LQ) are both negatively correlated with $-.614$ and $-.465$ respectively with both at 1% level of significance. It shows us that an increase in LV and LQ leads to decrease in ROA and vice-versa. Similarly, the correlation between growth of the premium (PG) and ROA is positive and insignificant.

On the other hand, the SZ is positively related with return on equity (ROE) with $.271$ at 5% level of significance. This shows us that the increase in firm size increases the shareholders' return and vice-versa. Likewise, the correlation coefficient between AG and ROE is positive and insignificant with $.157$. This shows us that the older the firm higher will be the ROE and vice-versa. The LV and PG are positively correlated with ROE with coefficient of $.075$ and $.044$ respectively. In contrast, LQ is negatively correlated and insignificant with ROE with correlation coefficient of -0.118 .

4.3 Regression analysis

Regression analysis is a statistical tool applied for the investigation of relationships between dependent and independent variables. It also helps to test whether these relationships are statistically significant or not. The regression of performance of insurance companies has been analyzed by defining insurance company's performance in terms of Return on Assets and Return on equity. During this analysis, Model summary has been presented to identify the explanation of independent variables on dependent variables and ANOVA analysis is done to test the significance of model and the joint effect of independent variables on dependent variable. Regression analysis is further carried to test the validity of tally with the result obtained from correlation analysis, test hypothesis and to test multiple regression models.

4.3.1 Model Summary

The model summary gives the total variability in the dependent variable explained by the model. This then indicates the percentage of the variability in the dependent variable explained by factors not included on the study. The regression model for $ROA_{i,t} = \beta_0 + \beta_1 LV_{i,t} + \beta_2 AG_{i,t} + \beta_3 SZ_{i,t} + \beta_4 LQ_{i,t} + \beta_5 PG_{i,t} + \epsilon_{i,t}$ and $ROE_{i,t} = \beta_0 + \beta_1 LV_{i,t} + \beta_2 AG_{i,t} + \beta_3 SZ_{i,t} + \beta_4 LQ_{i,t} + \beta_5 PG_{i,t} + \epsilon_{i,t}$. Leverage (LV in percent), Age of company (AG in years), Size of company (SZ- logarithm of assets in millions rupees), Liquidity (LQ in percent) and Premium Growth (PG in percent) are independent variables and financial performance measured by ROA and ROE are considered dependent variables.

Table 4.3 Model Summary on ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.440 ^a	.193	.113	16.70658

a. Predictors: (Constant), PREMIUM GROWTH, SIZE, AGE, LIQUIDITY, LEVERAGE

b. Dependent Variable: ROE

Source: SPSS output result outcome

Table 4.4 Model Summary on ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779 ^a	.607	.567	3.09863

a. Predictors: (Constant), PREMIUM GROWTH, SIZE, AGE, LIQUIDITY, LEVERAGE

b. Dependent Variable: ROA

Source: SPSS output result outcome

Table 4.3 illustrated that the multiple correlation coefficient $R = 0.440$ indicated that there was a moderate positive correlation between size, age, leverage, liquidity and growth of the premium on return on equity of the insurance firms in Nepal. Also, the value R-Square is 0.193, meaning that these independent variables can account for

19.3% of the variation on ROE of insurance companies in Nepal. However, the remaining 80.7% change in return on equity of Nepalese Insurance companies is caused by other factors not included in the model.

Similarly, Table 4.4 illustrated that the multiple correlation coefficient $R = 0.779$ indicated that there was a strong positive correlation between size, age, leverage, liquidity and growth of the premium on return on assets of the insurance firms in Nepal. Also, the value R-Square is 0.607, meaning that these independent variables can account for 60.7% of the variation on ROA of insurance companies in Nepal. However, the remaining 39.3% change in return on asset of Nepalese Insurance companies is caused by other factors that are not included in the model.

4.3.2 ANOVA

The study sought to establish analysis of variance (ANOVA) which was a collection of statistical models used to analyze the differences among group means and their association. The ANOVA statistics presented was used to present the regression model significance.

Table 4.5 ANOVA test on ROE

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3342.565	5	668.513	2.395	.050 ^b
	Residual	13955.494	50	279.110		
	Total	17298.059	55			

a. Dependent Variable: ROE

b. Predictors: (Constant), PREMIUM GROWTH, SIZE, AGE, LIQUIDITY, LEVERAGE

Source: SPSS output result outcome

Table 4.6 ANOVA test on ROA**ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	740.695	5	148.139	15.429	.000 ^b
Residual	480.074	50	9.601		
Total	1220.769	55			

a. Dependent Variable: ROA

b. Predictors: (Constant), PREMIUM GROWTH, SIZE, AGE, LIQUIDITY, LEVERAGE

Source: SPSS output result outcome

Table 4.5 illustrated that the F significance of ANOVA test on ROE showed the p-value of 0.05, meaning that there is probability of 5% of the regression model presenting false information. Similarly, on table 4.6 the F on ANOVA test on ROA, an F significance value of $p < 0.001$ was established showing that there is a probability of 0.1% of the regression model presenting a false information.

4.3.3 Normality Test

Normality tests are used to determine if a data set is well-modeled by normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. An informal approach to test normality is to compare histogram of a sample data to a normal probability curve. The empirical distribution of the data (the histogram) should be bell-shaped and resemble the normal distribution. Fig 4.1 and Fig 4.2 presented a histogram of standardized residual of ROE and ROA respectively.

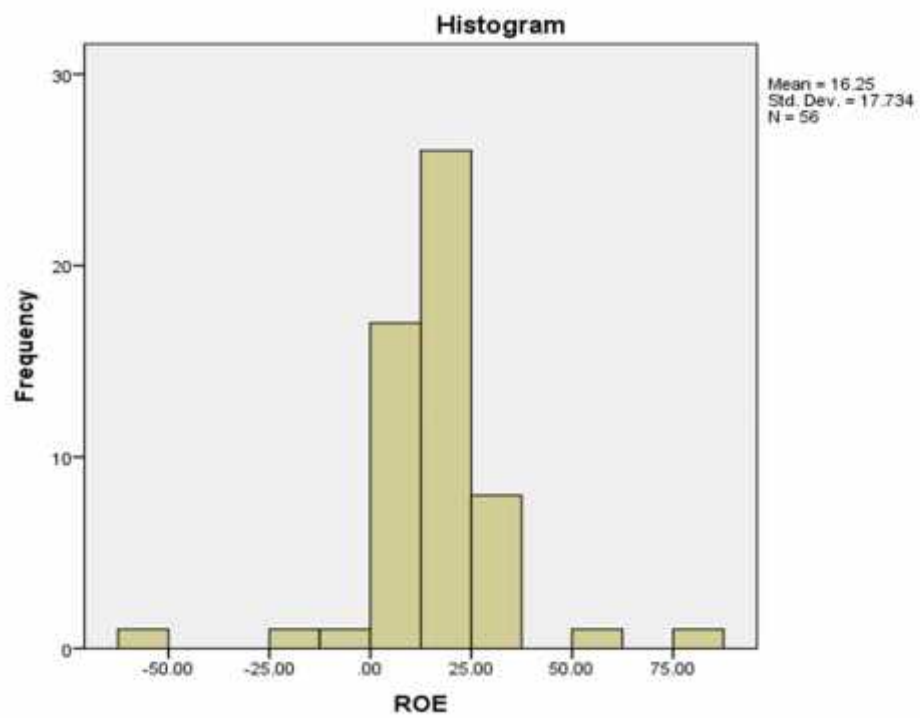


Fig 4.1: Histogram of Standardized Residual of ROE

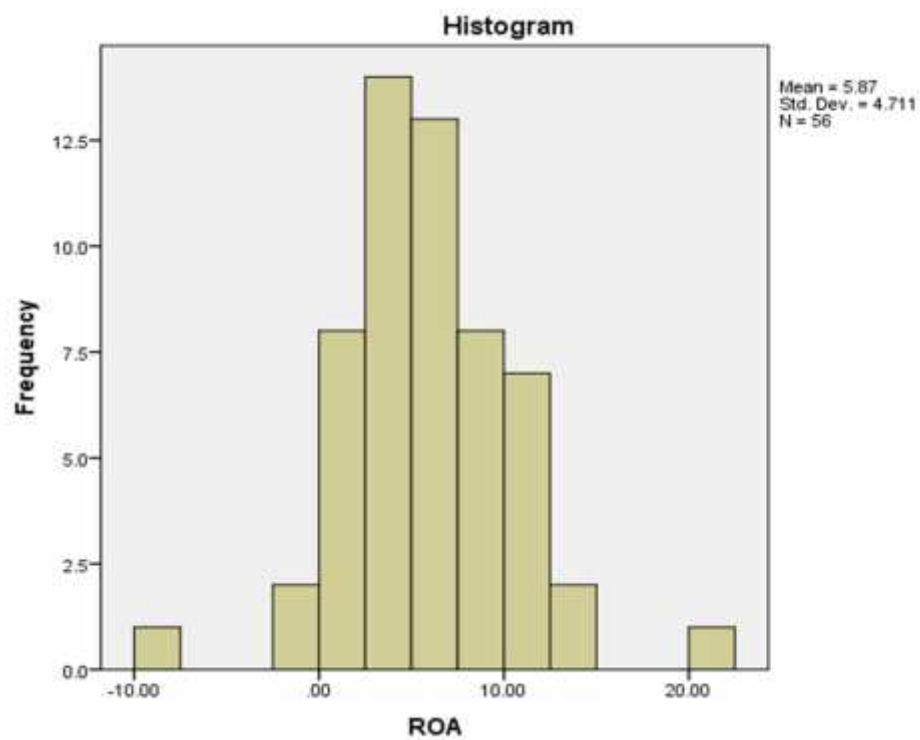


Fig 4.2: Histogram of Standardized Residual of ROA

Source: SPSS output result outcome

With a visual inspection of Fig 4.1 and Fig 4.2, we found both the histogram of standardized residual of ROE and ROA were approximately bell-shaped resembling normally distributed with mean of ROE= 16.25 and mean of ROA= 5.87.

4.3.4 Regression Coefficient

The results are based on panel data of 8 Nepalese insurance companies with 56 observations for the period of 2010/11 to 2016/17 by using linear regression model. The following panel regression models were estimated;

$$ROE_{i,t} = \beta_0 + \beta_1 LV_{i,t} + \beta_2 AG_{i,t} + \beta_3 SZ_{i,t} + \beta_4 LQ_{i,t} + \beta_5 PG_{i,t} + \epsilon_{i,t}$$

$$ROA_{i,t} = \beta_0 + \beta_1 LV_{i,t} + \beta_2 AG_{i,t} + \beta_3 SZ_{i,t} + \beta_4 LQ_{i,t} + \beta_5 PG_{i,t} + \epsilon_{i,t}$$

Where;

ROA= Return on Asset, ROE= Return on Equity, AG= Age of Company, SZ= Size of Company, LV= Leverage, LQ= Liquidity, PG= Premium on Growth

ϵ =Error item, β_0 =Constant, i= Insurance company

t= index of time periods

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are parameters to be estimated

Table 4.7 Regression coefficient for return on equity and affecting factors

Regression Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-164.668	58.022		-2.838	.007
SIZE	21.646	7.522	.609	2.878	.006
AGE	.001	.463	.000	.002	.999
LEVERAGE	-.202	.191	-.205	-1.054	.297
LIQUIDITY	-1.634	.754	-.374	-2.169	.035
PREMIUM GROWTH	-.011	.083	-.020	-.134	.894

a. Dependent Variable: ROE

Source: SPSS output result outcome

After the computation of the determinants of financial performance of selected insurance companies in Nepal; the findings as computed on table 4.7 indicated that firm size had a p-value=0.006, less than the significance level of 0.01. This showed a strong relationship between firm sizes as a factor affecting return on equity of selected insurance companies. The beta coefficient of size of the insurance companies is positive. So, result indicated there is positive and significant relationship between size and ROE. Conversely, age of the company had a p-value=.999, more than the significance level of 5%. This shows a weak relationship between age as a firm specific factor determining return on equity of insurance companies in Nepal. Moreover, slightly positive coefficient has been established, meaning that the age of the insurance companies positively affects the ROE with minimal effect. Likewise, Leverage has also been considered insignificant factor determining return on equity of insurance companies in Nepal with a p-value of 0.297. Leverage is negatively related with ROE of insurance companies in Nepal. On the other hand, liquidity showed a p-value of 0.035, which is less than 0.05 level of significance. So, the result indicated a strong relationship between liquidity as a firm-specific factor to explain the return on equity of insurance companies in Nepal. Liquidity showed a negative effect on ROE of insurance companies in Nepal. The last variable of the study, growth of the premium has a p-value of 0.894. This showed a weak relationship between growth of the premium and financial performance of insurance companies as measured by ROE. The growth of the premium also showed a negative effect on ROE of insurance companies in Nepal.

Table 4.8 Regression coefficient for return on assets and affecting factors

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-24.803	10.762		-2.305	.025
SIZE	4.744	1.395	.503	3.401	.001
AGE	.120	.086	.149	1.397	.168
LEVERAGE	-.209	.035	-.801	-5.908	.000
LIQUIDITY	-.464	.140	-.399	-3.316	.002
PREMIUM GROWTH	-.003	.015	-.023	-.217	.829

a. Dependent Variable: ROA

Source: SPSS output result outcome

The findings as computed on table 4.8 indicated that firm size had a $p=0.001$, less than the significance level of 0.01. This showed a strong relationship between firm sizes as a factor affecting return on assets of selected insurance companies. The beta coefficient of size of the insurance companies is positive. So, result indicated there is positive and significant relationship between size and ROA. Conversely, age of the company had a $p\text{-value}=.168$, more than the significance level of 5%. This shows a weak relationship between age as a firm specific factor determining return on assets of insurance companies in Nepal. Moreover, positive coefficient has been established, meaning that the age of the insurance companies positively affects the ROA. Likewise, Leverage and Liquidity had been considered very significant factor determining return on assets of insurance companies in Nepal with a $p\text{-value}$ of 0.000 and 0.002 respectively. However, Leverage and liquidity both had negatively affected with ROA of insurance companies in Nepal. Growth of the premium has a $p\text{-value}$ of 0.829. This showed a weak relationship between growth of the premium and financial performance of insurance companies as measured by ROA. The growth of the premium also showed a negative effect on ROA of insurance companies in Nepal.

Analyzing the study result, the observed size of company is positively related with financial performance of insurance companies. Thus, the first hypothesis (H_1) is accepted. Similarly, the second hypothesis (H_2) has also been accepted as the result revealed positive relationship between age of company and financial performance of insurance companies. Third hypothesis (H_3) that deals with negative relation between leverage and financial performance of insurance companies is accepted. The fourth hypothesis (H_4) that deals with positive relationship between liquidity and financial performance of insurance companies is rejected as the result showed the negative effect of liquidity on financial performance. Likewise, the fifth hypothesis (H_5) that show growth of premium is positively related to the financial performance of insurance companies is also rejected as the result showed negative impact of growth of the premium on financial performance of insurance companies in Nepal.

4.4 Major findings

This study attempts to analyze the factors affecting the financial performance of the insurance companies in Nepal. More specifically, the study aims to find out the impact of leverage, age, size, liquidity, and growth of premium of the insurance companies and the financial performance of insurance companies in Nepal. In this case, the findings from descriptive statistics, correlation analysis, ANOVA test and linear regression model following assumption are presented as follows:

- 1) The descriptive result showed that the dependent variable, return on assets of insurance companies in Nepal is found ranging from -8.53 percent to 20.95 percent with an average of 5.87 percent. Return on equity is found ranging from unexpected -58.69 percent to 85.16 percent with an average of 16.25 percent. Hence, this showed that standard deviation from mean of ROE is greater than that of ROA with 17.734 of ROE versus 4.711 of ROA.
- 2) Similarly, the independent variables, Size of company is found ranging from 8.37 to 10.71 on logarithmic expression with an average of 8.764. Age of company is found ranging from 4 years to 24 years with an average of 14.63 years. Leverage is found ranging from 9 percent to 97 percent with an average of 62.45 percent. Liquidity is found ranging from 0.07 percent to 15.64 percent with an average of 3.65 percent. Likewise, growth on premium is

found ranging from -64.24 percent to 124.19 percent leading with an average of 29.04 percent.

- 3) The result of correlation coefficient showed negative relation of size of the company, leverage and liquidity of insurance companies with return on assets. The result of correlation coefficient also showed positive relation of age of the company and premium growth with return on assets.
- 4) Similarly, the result of correlation coefficient showed negative relation of liquidity with return on equity. The result of correlation coefficient also showed positive relation of size of company, age of the company, leverage and growth on premium with return on equity.
- 5) The regression model on ROE revealed that the beta coefficient for size and age are positive. Similarly, for the leverage, liquidity and premium growth of company; beta coefficient is negative. Where only size and liquidity of the insurance companies are significantly related with ROE at 1% and 5% level of significance respectively; remaining other independent variable remain insignificant at 5% level.
- 6) Similarly, as on ROE, the regression model on ROA also revealed that the beta coefficient for size and age are positive. Similarly, for the leverage, liquidity and premium growth of company, beta coefficient is negative. The result also revealed that size, leverage and liquidity of the insurance companies are significantly related with ROA with 1% level of significance whereas age and premium growth of the insurance companies are insignificant even on 5% level of significance.
- 7) The findings further revealed that the value of R square on ROE is 0.193 which means that around 19.3 percent variation in return on equity is explained by the regression equation involving independent variables leverage, age, size, liquidity and premium growth. The ANOVA test showed F- value of 2.395 which is also significant at 5% level.
- 8) The findings also revealed that the value of R square on ROA is .607 which means that around 60.7 percent variation in return on assets is explained by the regression equation involving independent variables leverage, age, size,

liquidity and premium growth. The ANOVA test showed F- value of 15.429 which is also are significant at 1% level.

The summary of findings is presented below:

Table 4.9: Relation of independent variable with ROE

INDEPENDENT VARIABLES	ROE	STATISTICAL SIGNIFICANCE
SIZE	POSITIVE	SIGNIFICANT AT 1%
AGE	POSITIVE	INSIGNIFICANT
LEVERAGE	NEGATIVE	INSIGNIFICANT
LIQUIDITY	NEGATIVE	SIGNIFICANT AT 5%
PREMIUM GROWTH	NEGATIVE	INSIGNIFICANT

Table 4.10: Relation of independent variable with ROA

INDEPENDENT VARIABLES	ROA	STATISTICAL SIGNIFICANCE
SIZE	POSITIVE	SIGNIFICANT AT 1%
AGE	POSITIVE	INSIGNIFICANT
LEVERAGE	NEGATIVE	SIGNIFICANT AT 1%
LIQUIDITY	NEGATIVE	SIGNIFICANT AT 1%
PREMIUM GROWTH	NEGATIVE	INSIGNIFICANT

4.5 Discussion

This study has mainly focused on impact of firm-specific variables on the financial performance of Nepalese insurance companies. This study used independent variables: firm size, age, leverage, liquidity and premium growth. While the dependent variables are return on assets and return on equity. The study is carried out on the selected 8 Nepalese Insurance companies covering the period of 2010/2011 to 2016/2017.

Descriptive statistics, correlation and regression analysis are used in order to study the impact of firm-specific variables on insurance companies' financial performance as measured by ROA and ROE. According to the descriptive statistics, ROA has a mean value of 5.87. This indicates that the sample insurance company on average earned 5.87 percent of the total asset during the study period. Since ROA indicates the efficiency of the management of a company in generating return from all the resources of the institutions, higher ROA shows that the company is more efficient in using its resources. Return on Assets ranges from minimum value of -8.53 percent to maximum value of 20.95 percent. That means the most profitable and least profitable insurance company among the sampled insurance companies earned 20.95 and -8.53 percent of net income for a single rupee invested in the assets of the firm respectively. Return on Equity varies much from minimum value of -58.69 percent to maximum value of 85.16 percent leading to average of 16.25 percent. This implies that, the sample insurance companies on average earned 16.25 percent of each rupee invested in equity. It can also be said that during the study period, the sample insurance company in Nepal had relatively good performance as measured by ROE than compared with the ROA.

Similarly, the Pearson's correlation between the variables employed in the study is of 8 sample insurance companies of Nepal. The result shows that firm size (SZ), Leverage (LV) and Liquidity (LQ) are negatively related to return on assets (ROA), where leverage and liquidity are significant at 1% and size was insignificant. However, Age (AG) and Premium Growth (PG) showed positive correlation with ROA where age was significant at 1% and premium growth was insignificant. On the other hand, Pearson's correlation coefficient between firm specific variables and ROE indicated that all the studied variables except liquidity showed positive correlation on ROE. In other words, firm size, age, leverage and growth of the premium are positively correlated whereas liquidity showed a negative correlation.

Likewise, regression analysis results presented using separate table for each model in previous section revealed that the size of the insurance companies is positively related with financial performance of insurance companies and is highly significant. Thus, the result of the regression output is consistent with the study made by (Gonga & Sasaka, 2017), Kaya (2015), Daare (2016) and Wolde (2016). They concluded from

the study that the size is significant factor to positively affect the profitability of the company.

The regression results of the study also showed that there is a positive but statistically insignificant relationship between age of insurance companies and their financial performance in Nepal. The result of the study is inconsistent with the concept of learning curve. As the learning curve suggests that, with history of experience and operation; it decreases the frequency of mistake, lowers the operating expenditure; hence increases the financial performance. Thus, the result of this study also contradicts with the study made by Dogan(2013) and Selcuk (2016). They concluded that the age of the company is significant and negatively related with the profitability. From the study it is also found that there is negative and marginally significant relationship between leverage and financial performance of insurance companies in Nepal. However, leverage is highly significant and negatively related with profitability, if we measure in terms of ROA. The result is consistent with the study made by Wanjugu (2014) and Kaya (2015). However, the evidence presented by Batchineg (2017) supported that there is insignificant relationship between leverage and profitability of the firms, which is inconsistent with the result of this study.

The study further indicated that there is significant and negative relation between liquidity and financial performance of the insurance companies in Nepal. Empirical evidences presented by Kaya (2015), Shala et. al (2014), Wan (2014) and Daare (2016) indicate liquidity as a statistically significant factor determining profitability of the firms. Among these studies, Kaya (2015) and Wan (2014) also showed negative relation of liquidity with financial performance of the companies; which is consistent with this study. However, as opposed to the result of this study, the evidence from Shala et. al (2014) resulted significant and positive relation with profitability of insurance companies.

The result of the study also indicated that there is insignificant and negative relationship between growth of the premium and the financial performance of insurance companies in Nepal. The result is consistent with the study conducted by Batchineg (2017), Daare (2016) and Kartikasari & Merianti (2011). They concluded that the growth of the premium cannot express the financial performance of the firms. However, the study conducted by Kaya (2015) indicated that there is significant and

positive relationship between growth of the premium and financial performance of insurance companies.

CHAPTER - V

CONCLUSIONS

This chapter presents the brief summary of the entire study. In addition, the major conclusions are discussed based on the findings of the study in separate section of this chapter which is followed by some recommendations regarding the impact of firm-specific factors on financial performance of insurance companies in Nepal. Finally, the chapter ends with the scope of the future studies in the same field.

5.1 Summary

The purpose of this study was to investigate the firm-specific factors affecting the financial performance of insurance companies in Nepal. The insurance industry in particular is a part of immune and repair system of an economy. So, the successful operation of the insurance industry can set energy for other industries and development of an economy. To do so, the insurance industry is expected to be financially solvent and strong enough to be profitable in operation. Hence, not only measuring the financial performance of insurance companies but also to provide clear insight about factors affecting financial performance in the industry is the problem to be investigated.

According to previous studies made on the determinants of financial performance, performance is affected by both firm-specific and macroeconomic factors. Internal factors are mainly influenced by firm size, age of the firm, leverage, liquidity, growth of the premium etc. Similarly, macroeconomic factors represent events outside the control of the insurance company and also called external factor such as GDP, Inflation, interest rates etc. However, this study entirely focused on firm-specific factors.

Conceptual framework of the study explains the systematic explanation of the relationship among the dependent and independent variables for the purpose of explaining the firm-specific factors affecting the financial performance where dependent variable is taken as return on assets and return on equity, whereas the

independent variables are age of company, size of company, leverage, liquidity and premium on growth.

This study focused on the analysis of factors affecting the financial performance and its result applied on financial control, planning and decision making. This studies add to the body of the knowledge in the finance discipline and form foundation for developing the finding for further research and may act as a source of reference in the future for academic and professional people, shareholders, investors, customers and other key stakeholders.

By using firm-specific factors such as firm size, age, leverage, liquidity and growth of the premium, this study examined the determinants of financial performance of eight insurance companies in Nepal over the period 2010/2011 to 2016/2017 leading to total 56 observations. This study has employed descriptive research design and causal comparative research design to deal with issues associated with the impact of firm-specific factors affecting the financial performance of insurance companies in Nepal. The study is based on secondary data and the samples are chosen through convenience sampling method to collect the data of those insurance companies for the study. Statistical package for social science (SPSS) software is used to analyze the data and to get the required information and results. The data were analyzed using descriptive statistics, correlation and multiple linear regression analysis. The analyses were made in line with the specific research objectives and stated hypotheses formulated in the study. Data used for the internal factors were obtained from respective insurance company financial reports, Insurance Board supervision report and also from Insurance Board statistics.

According to the descriptive statistics, ROA has a mean value of 5.87 percent, whereas ROE has mean value of 16.25. This indicates that the sample insurance companies perform well with the shareholders' capital than on the assets of the company. But, the standard deviation showed that the fluctuation from mean value of ROE is greater than that of ROA ($17.734 > 4.711$); this indicate that there is high variation on ROE among insurance companies than on ROA. It put the risk forward for the shareholders of the firm.

In relation to financial performance measured by ROA; Firm's size and firm's age have positive coefficient, but leverage, liquidity and premium growth have negative coefficient. However only Firm size, leverage and liquidity have significant impact and firm's age and premium growth have no significant impact on ROA. On the other hand, in relation to financial performance measured by ROE; Firm's size and firm's age have positive coefficient, but leverage, liquidity and premium growth have negative coefficient. However only Firm size and liquidity have significant impact and firm's age, leverage and premium growth have no significant impact on ROE.

5.2 Conclusions

The main objective of this research was to examine the relationship between firm-specific variables with financial performance of insurance companies in Nepal. The key findings indicated that there is significant relation between numbers of variables that fosters the performance of Insurance companies in Nepal. This implies that Insurance company should give due attention to these variables in order to strengthen their performance in terms of ROA and ROE.

Firm's size and Liquidity showed significant impact on profitability of Insurance Company, but the firm's age, leverage and premium growth found to be insignificant to describe the financial performance of insurance companies as measured in terms of ROE. Firm's size also has positive impact on ROE, this indicates that increment on firm's size increases the ROE of the insurance companies. However, the liquidity showed a negative relationship with ROE, signaling that higher the liquidity position of insurance firms lower will be the return on equity of insurance companies in Nepal. The value of R-square is 19.3 percent and the model on ROE is fit as F value is 2.395 with 5% level of significance.

On the other hand, Firm's size Leverage and Liquidity showed significant impact on profitability of Insurance Company, but the firm's age, and premium growth found to be insignificant to describe the financial performance of insurance companies as measured in terms of ROA. Firm's size also has positive impact on ROA, this indicates that increment on firm's size increases the ROA of the insurance companies.

However, the leverage and liquidity position of insurance companies showed a negative relationship with ROA, signaling that higher the leverage and liquidity position of insurance firms lower will be the return on assets of insurance companies in Nepal. The value of R-square is 60.7 percent and the model on ROA is fit as F value is 15.429 with 1% level of significance.

5.3 Implications

The recommendation of this study may be the important information for those who are concerned directly or indirectly with the financial performance of the insurance companies in Nepal. Thus, following recommendation and suggestion can be outlined:

- 1) The study result indicates that size of company is positively and significantly related to financial performance. It indicates that large size of company, increases financial performance. So, companies should give higher consideration on increment of the company assets to expand their operation and to take advantage of economies of scale.
- 2) There is negative impact of age on financial performance but the relation is insignificant. Hence, the insurance companies have nothing to do with the age of the company since establishment. This implies that, it is good indication for new entrants to insurance industry as the age of company has no influence on its better performance.
- 3) The study found negative relationship of leverage with financial performance. Hence, the insurance companies willing to borrow fund have to think twice as the increase in debt leads to decrease in the profitability of insurance companies in Nepal. Also, high attention need to be paid on leverage as higher leverage may take company at risk of bankruptcy if they are unable to make payments on their debt; they may also unable to find new lenders in the future.
- 4) The study showed negative relationship between liquidity and financial performance of insurance companies and the relation is significant. It implies that the company making idle current assets lose the profit. Hence, special attention need to be taken to efficiently utilize the idle short-term assets. Similarly, the company should also focus on current liabilities by effectively

executing short-term financing policy. The credit need to be paid only when it is due. In order to increase the level of current liabilities short term funds can be borrowed by mortgaging current assets to maintain the optimum level of liquidity.

- 5) The study observed negative relationship of premium on growths with financial performance of insurance companies, but the relation is insignificant. This implies that, there is no proper relation between growth of premium and financial performance. The growth of the premium might have been achieved through mass advertising and spending more on attracting people which exceed the returns received through added insurance policies. Hence, the companies should focus on operational effectiveness and training and development of staffs to ensure that the growth in premium collection will exceed the managerial expenses incurred by the added insurance policies. Furthermore, Insurance companies may have weak financial position under the position of high premium growth too; if the underwriting is excessive, if the risk selection or pricing is not done carefully, and if the financial resources are insufficient to cover risk.

5.4 Scope for the future research

For further study on profitability in insurance companies, it is better to use longer period of observation to adequately investigate the effects of variables on profitability of insurance companies and further research should investigate based on insurance type (life and non-life) that would provide better insight for determinants of insurance company's profitability.

This study has tried to cover the firm- specific factors related with the financial performance of Nepalese insurance companies. However, further studies can be carried out on the basis of the findings of this study. Some of the future scopes of this study are listed as below:

- 1) The study is based on the period of seven years from year 2010/11 to year 2016/17. So, it is better to use longer period of observation to adequately investigate the effects of variables on profitability of insurance companies.
- 2) Further research could investigate the determinant of financial performance of insurance companies based on insurance type (life and non-life) that

would provide better insight for determinants of insurance company's profitability.

- 3) The study was only limited to five firm-specific factors that affect the financial performance of eight insurance companies in Nepal. Thus, more research should be done to determine other factors like: Loss ratio, Investment ratio, Solvency margin, Tangibility of assets, etc. that may affect financial performance. Also further research can include macro-economic factors such as inflation rate and gross domestic product etc.
- 4) The sample size is limited to eight insurance companies. so future study can be carried out with more sample size. Inclusion of more samples in the study makes the research more generalizable.
- 5) The study is totally based on secondary data. So, future studies can be done using both primary and secondary data to see the factors affecting the financial performance and managerial efficiency of insurance companies in Nepal.

References

- Abdurrahman, A., Awad, S.H., Erik, V.N., & Jeffrey, S.R. (2003). Indicator variables model of firm's size-profitability relationship of electrical contractors using financial and economic data. *Journal of Construction Engineering and Management*, 129, 192-197.
- Adams, M. B., & Buckle, M. J. (2003). The Determinants of Corporate Financial Performance in the Bermuda Insurance Market. *Applied Financial Economics*, 13, 133-143.
- Ahmed, N., Ahmed, Z., & Usman, I. (2011). Determinants of Performance: A case of life insurance Sector of Pakistan. *International Research Journal of Finance and Economics*, 61, 123-128.
- Akinlo, A. E. (2008). Firm Size- Profitability Nexus: Evidence from Panel Data for Nigeria. *Economic Research*, 25(3), 706-721.
- Almajali, D. A., Alamro, S. A., & Al-Soub, Y. Z. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman stock exchange. *Journal of Management Research*, 4(2), 266-289.
- Ansari, V. A. & Fola, W. (2014). Financial Soundness and Performance of Life Insurance Companies in India. *International Journal of Research.*, 1, 224-253.
- Batchineg, B. (2017). Financial Performance Determinants of Organizations: The Case of Mongolian Companies. *Journal of Competitiveness*, 9, 22-33.
- Bourke, P., 1989. Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking and Finance* 13, 65-79.
- Burca, A. M., & Batrinca, G. (2014). The determinants of financial performance in the Romanian insurance market. *International Journal of Academic Research in Accounting and Management Sciences*, 4(1), 299-308.
- Buyinza, F., Francios, J., & Landesmann, M. (2010). *Determinants of Profitability of Commercial Banks in Sub Saharan Africa Countries*. Department of Economics, Johanssen Kepler University, Linz Austria.
- Carson, J. M., & Hoyt, R. E. (1995). Life Insurers Financial Distress: Classification Models and Empirical Evidence. *Risk Insurance*, 62, 764-775.

- Cekrezi, A. (2015, April). Determinants of financial performance of the insurance companies: A case of Albania. *International Journal of Economics, Commerce and Management*, III(4), 1-10.
- Daare, W. J. (2016). Determinants of Non-Life Insurance Companies Profitability: An Empirical Study in India. *International Journal of Innovation Research and Advanced Studies*, 3 (13), 6-11.
- Dogan, M. (2013). Does Firm Size Affect the Firm Profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, 4, 53-60.
- Kerlinger, F. N. (1986). *Foundations of Behavioural Research* (3rd ed.). New York: Holt,
- Ghimire, R. & Kumar, P. (2014). Testing of Financial Performance of Nepalese Life Insurance Companies by CAMELS Parameters. *Journal of Business and Management*, 1-15.
- Gonga, M. A., & Sasaka, P. S. (2017). Determinants of financial performance of insurance firms : A survey of selected insurance firms in Nairobi County. *The strategic Journal of Business & Change Management*, 4(4), 123-143.
- Haywood, P., & wragg, E. (1996). *Evaluating the literature: rediguide*. School of Education. Nottingham University.
- Ebbinghaus, H. (1885). *Memory: A contribution to experimental psychology*. New York: Dover.
- Iswatia, S., & Anshoria, M. (2007). The influence of intellectual capital to financial performance at insurance companies in Jakarta stock exchange (JSE). *Proceeding of the 13th Asia pacific Management Conference*.
- Janotta-Simons, F. (1999). Solvency- Its definition, influencing factors, and perspectives of co-ordinated solvency rules. *Insurance Regulation and Supervision in Asia*.
- John, A. O., & Adebayo, O. (2013). Effect of Firm Size on Profitability: Evidence from Nigerian Manufacturing Sector. *Prime Journal of Business Administration and Management*, 3, 1171-1175
- Kandoker, M. H., Raul, R. K., & Rahman, M. G. (n.d.). *Determinants of profitability of Non-Bank Financial Institutions' in a developing country: Evidence from Bangladesh*. (n.p.).

- Kartikasari, D., & Merianti, M. (2016). The Effect of Leverage and Firm Size to Profitability of Public Manufacturing Companies in Indonesia. *International Journal of Economics and Financial Issues*, 6(2), 409-413
- Kaya, E. O. (2015). The Effects of Firm-Specific Factors on the Profitability of Non-Life Insurance Companies in Turkey. *International Journal of Financial Studies*, 3, 510-529
- Khan, S. A. (2015). *Determinants of the Non-Life Insurance Performance: The Portuguese Case*. Master's Degree Thesis. Lisboa School of Economics and Management.
- Leflaive, V. (2002). Comparative Analysis. *Insurance Solvency Supervision: OECD Country Profiles*, 108, 1-24.
- Liargovas, P., & Skandalis, K. (2008). *Factor affecting firms financial performance: The case of Greece*, University of Peloponnese, Department of Economics.
- Loderer, C., & Waelchli, U. (2010). Firm Age and Performance. (n.p.).
- Majumdar, S. (1997). The impact of size and age on firm-level performance : Evidence from India. *Review of Industrial Organization*, 12, 231-241.
- Molyneux, P., & Thornton, J. (1992). Determinants of European Bank Profitability: A Note. *Journal of Banking & Finance*, 16(6), 1173-1178.
- Myers, S. C., & Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms have Information that Investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
- Modigliani, F., & Miller, M. (1985). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3), 261-297.
- Ngui, A. N. (2010). *A survey of the use of financial performance indicators by SACCOS in Kenya*, An Unpublished MBA Thesis. University of Nairobi.
- Niresh, J.A., & Velnampy, T. (2014). Firm Size and Profitability: A Study of Listed Manufacturing Firms in Sri Lanka. *International Journal of Business and Management*, 9, 57-64.
- Ostroff, C., & Schmitt, N. (1993). Configuration of organizational effectiveness and efficiency. *Academy of Management Journal*, 36(6), 1345-1361.
- Pant, P. R. (2016). *Social Science Research and Thesis Writing* (7th ed.). Kathmandu: Buddha Publications Pvt. Ltd.

- Pervan, M., Pervan, I., & Curak, M. (2017). The Influence of Age on Firm Performance: Evidence from the Croatian Food Industry. *Journal of Eastern Europe Research in Business and Economics*, 17,1-9.
- Ramadhan, Z.W. (2010). *The Relationship Between Interest Rates and Financial Performance of Firms Listed at the Nairobi Securities Exchange*. Unpublished MBA Project, University of Nairobi.
- Selcuk, E. A. (2016). Does Firm Age Affect Profitability? Evidence from Turkey. *International Journal of Economic Sciences*, 5, 1-9.
- Shala, A., Ahmeti, Y., Berisha, V., & Ahmeti, S. (2014). Factors Affecting Profitability of Insurance Companies in Kosovo. (n.p.)
- Shrestha, M. K., Bhandari, D. B., & Joshi, P. R. (2013). *Foundation of financial institutions & markets* (second ed.). Kathmandu: Asmita Books publishers and Distributors(P) Ltd.
- Shui, Y. (2004). Determinants of United Kingdom General Insurance Company Performance. *Br. Actuar. J.*, 10, 1079-1110.
- Sornsen, J. B., & Stuart, T. E. (2000). Aging, Obsolescence and Organizational Innovation. *Adm. Sci. Q*, 45,81-112.
- Subrahmanyamand, A., & Titman, S. (2001). Impact of liquidity and profitability of insurance companies in Ghana. *Journal of Finance*, 56, 239-241.
- Wanjugu, M. J. (2014). *The Determinants of Financial Performance of General Insurance Companies in Kenya*. Master's Degree Research Project, School of Business, University of Nairobi.
- Wolde, B. K. (2016). *Fators Affecting Insurance Companies Profitability in Ethiopia*. Master's Degree Thesis. School of Graduate Studies, St. Mary's University.
- Wright, T.P. (1936). Factors Affecting the Cost of Airplanes, *Journal of Aeronautical Sciences*, 3(4), 122–128.

Appendix-I

S. N.	INSURANCE COMPANY	YEAR	SIZE	AGE	LEVERAGE	LIQUIDITY	PREMIUM GROWTH	ROE	ROA
1	SICL	2010/11	765,392,031	7	0.7031	0.92	1.8	24.75	7.35
		2011/12	1027044511	8	0.7262	0.95	39.53	20.45	5.6
		2012/13	1166758892	9	0.6896	1.08	23.42	22.76	7.07
		2013/14	1378059684	10	0.5754	1.28	34.15	22.41	9.52
		2014/15	1863345058	11	0.5715	1.3	43.07	27.5	11.79
		2015/16	2662124952	12	0.4653	1.77	60.48	21.54	11.52
		2016/17	2439371471	13	0.2735	1.73	37	20.31	14.76
2	SIC	2010/11	853137639	15	0.6157	1.24	22	27.71	10.65
		2011/12	1134879870	16	0.6237	1.25	16.3	32.18	12.11
		2012/13	1436294595	17	0.6178	0.14	13.62	32.61	12.47
		2013/14	1854736976	18	0.5959	1.42	23.33	27.11	10.95
		2014/15	2400580139	19	0.6599	1.25	10.89	9.19	3.13
		2015/16	2591831123	20	0.6072	1.43	3.16	20.31	7.98
		2016/17	2900500362	21	0.5548	1.49	18.34	21.39	9.52
3	NIL	2010/11	419698022	16	0.5868	1.22	21.45	9.92	4.1
		2011/12	234018288	17	0.1326	1.25	26.37	14.93	12.95
		2012/13	622307786	18	0.6144	1.28	18.43	15.41	5.94
		2013/14	783620862	19	0.5599	1.49	10.82	10.64	4.68
		2014/15	1003447480	20	0.5048	1.47	14.15	18.55	9.19
		2015/16	1329113588	21	0.5372	1.48	84.49	19.77	9.15
		2016/17	2350208214	22	0.4772	1.68	74.72	16.97	8.87

4	PIC	2010/ 11	393571413	18	0.5624	1.28	-20.93	10.9 5	4.79
		2011/ 12	438704312	19	0.5607	1.22	25.48	11.8 8	5.22
		2012/ 13	575852234	20	0.6092	1.27	41.02	15.2 1	5.94
		2013/ 14	744542181	21	0.6392	1.29	38.14	17.0 5	6.15
		2014/ 15	626047065	22	0.0948	1.53	90.93	23.1 5	20.9 5
		2015/ 16	154667116 5	23	0.5172	1.66	66.35	24.7 3	11.9 4
		2016/ 17	193597942 6	24	0.5358	1.55	55.85	17.3 4	8.05
5	NLIC	2010/ 11	976202794 2	12	0.9656	1.51	17.96	- 19.8	- 0.68
		2011/ 12	123775604 67	13	0.9406	1.77	34.21	85.1 6	5.06
		2012/ 13	149040295 89	14	0.911	4.86	22.67	58.3 8	5.2
		2013/ 14	200401737 82	15	0.9075	8.09	47.08	33.1 2	3.06
		2014/ 15	270940721 84	16	0.9129	12.56	43.47	22.3 6	1.95
		2015/ 16	363111541 14	17	0.911	15.64	27.1	28.0 4	2.5
		2016/ 17	507508740 56	18	0.847	8.76	18.95	12.9 3	1.98
6	GLICL	2010/ 11	733484769	4	0.4628	3.81	124.19	- 2.29	- 1.23
		2011/ 12	133366595 0	5	0.6736	4.35	64.63	4.15	1.35
		2012/ 13	121629991 5	6	0.604	10.37	11.11	7.33	2.9
		2013/ 14	177215689 0	7	0.6357	13.13	33.7	3.91	1.42
		2014/ 15	237526591 2	8	0.7126	11.9	43.25	2.51	0.72
		2015/ 16	319505462 6	9	0.7634	13.95	36.46	3.52	0.83
		2016/ 17	418662106 8	10	0.812	12.17	22.09	3.94	0.74
7	EIC	2010/ 11	918018908	17	0.7541	1.07	6.24	15.4	3.79
		2011/ 12	996252009	18	0.8547	0.91	-16.88	- 58.6 9	- 8.53
		2012/ 13	934379826	19	0.7938	0.07	-64.24	26.6	5.5

		13						6	
		2013/ 14	772255469	20	0.6723	1.01	-53.07	19.5 2	6.4
		2014/ 15	774769935	21	0.637	0.95	6.42	15.3 5	5.57
		2015/ 16	708473457	22	0.5157	1.25	22.45	18.3 5	8.89
		2016/ 17	874933399	23	0.4839	1.47	-18.04	10.4 4	5.39
8	SLICL	2010/ 11	577571188	4	0.3178	7.41	1.48	4.34	2.96
		2011/ 12	743780980	5	0.4344	2.8	38.44	6.99	3.95
		2012/ 13	961966422	6	0.5208	6.87	33.71	8.74	4.19
		2013/ 14	141931403 1	7	0.5596	6.71	79.03	7.01	3.09
		2014/ 15	193745819 2	8	0.6686	4.75	63.19	3.42	1.13
		2015/ 16	279265526 4	9	0.7289	5.22	62.19	17.4 9	4.74
		2016/ 17	391624493 1	10	0.7663	4.06	24.27	14.8 9	3.48