

Financial Performance of Life Insurance Companies of Nepal

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(Received: May 20, 2022, Revised: November 4, 2022)

Abstract

This study aims to analyze the financial performance of life insurance companies in Nepal and examine the effect of operating efficiency on solvency margin position and operating profit margin of selected life insurance companies have been analyzed. The study revealed that a mixed result in terms of the degree of effect of financial performance on the operating efficiency. There are both significant and insignificant effects of solvency margin and operating profit on operating efficiency of both sample insurance company. There are still major hurdles to overcome in order for Nepal to realize the growth potential of its insurance industry. Research could be conducted on the growth in the written premiums accounted by insures. The design and methods were applied according to the research type which is descriptive analysis. The data was extracted from annual reports and Nepal Beema Sasthan office. The findings were completely based on the data and facts. Secondary data were collected for analysis from 2010/11 to 2020/21 to find the financial performance, descriptive and causal-comparative research designs was employed for analysis secondary data. Different statistical tools like; standard deviation, correlation coefficient, multiple regression analysis, etc. and financial tools like ratio analysis, solvency ratio, earning per share, total assets, return on assets, insurance premium were used to evaluate the secondary data obtained from secondary sources. The findings of the research have shown the overall calculated financial ratios are good enough for better financial performance of selected life insurance companies in Nepal.

Keywords: *Financial performance, Life insurance, Secondary data, Descriptive analysis, Data and figures.*

1. Introduction

Financial performance analysis is a process of analysing and evaluating a company's financial position. It focuses on reviewing, assessing and comparing financial statement a collection of data and figures organized according to recognized accounting principles. The analysis helps to determine whether a company is making a profit or loss. It shows how the company is spending, investing and earning money. Knowing how the company is performing, we are able to make better economic decisions and assess its potential. This study associated the financial performance of top three Nepalese life insurance companies (Nepal life, National life and LIC Nepal).

In terms of premium growth and policy holder bonus, these are top three companies leading Nepalese life insurance industry. An insurance company is a financial institution licensed by Beema samiti to issue insurance policies and bear contractual risks with collecting premiums from customers and providing them claim if occurrence of accidental damages and loss. Whereas services of Life insurance companies are not limited to these only, they have to pay death and pre matured claim, policy loan, surrender cases and other rider benefits as well. Especially, in developing country like Nepal, safety and security are one of the key issues. Insurance is probably a device providing financial compensation to those who suffer from misfortune. In other words, it is the best means for security to human life and property from various risks to minimize the financial loss. Life insurance companies are an essential component of a nation as it plays a crucial role in ensuring overall financial and economic stability. The future profitability of insurance industry holds immense importance for maintaining financial stability of the overall financial sector. It has thus become imperative to determine the factors that influence the financial performance of these firms. While such studies did not get precedence in the past, over the last few years, the number of studies conducted in this regard has been increasing. The word Insurance is as old as human civilization; however, the mode of insurance at present is very advance than that practiced in ancient time. Insurance is categorized in two broad areas: Life insurance and Non-Life Insurance. Life insurance is a kind of long-term saving instrument that is bundled with the risk coverage feature. But non-life or general insurance is quite different from life insurance in term of its objective and feature. The objective of general insurance is to transfer the risk of customer (insured) to insurance companies (insurer). In developed countries, insurance is taken as an essential tool of their livelihood and have given preference like food, clothes and shelter. But in developing countries like Nepal insurance is not in the place of priority (Ghimire, 2013).

Insurance is a contract between two parties; one party which pays premium is called insured which transfer risks to the insurance companies and another party which bear all the risks transferred by the insured are known as Insurer. Insurer is called insurance companies and insured is a customer. It is risk mitigation and risk transferring process which provides way to being compensated against uncertainties and their loss in the life of people and business. This implies that, one model of determining financial performance cannot be replicated in all circumstances. Despite the scenario, the studies that help determine factors that have significant impact on financial performance of life insurance companies in Nepal is minimal.

Life insurance (or life assurance) is a contract between an insurance policy holder and an insurer or assurer, where the insurer promises to pay a designated beneficiary a sum of money upon the maturity or the death of an insured person (proposer). Depending on the contract, other events such as terminal illness or critical illness can also trigger payment. The policyholder typically pays a premium, either regularly or as one lump sum. In Nepal following policies are in practice:

Endowment life insurance: It covers the risk till insured period. Sum assured and policy bonus is paid at the maturity or any incident happened during the insurance period.

Whole life insurance: It covers the risk till the policy holder is alive. Premium is payable up to the maturity period only. Policy is continued after the maturity till his life. Hence insurer pay two times in this policy, one at the time of maturity and another payment at the death of insured after the policy maturity.

Money back life insurance: Insurance Company pays money to insured personnel before the maturity of policy. Like as yearly money back or money back at 5-10-15 years.

Term life insurance: This covers only risk there is no investment component. Premium of those policies are very small. e. g. FE employment – this is term life insurance. Company pays sum assured only if accident is occurred during insurance period. No entitled for any payment if the insured is alive and fine.

This research paper will try attempted to analysis the comparative financial performance of Nepal life insurance company limited (NLIC), Life insurance corporation (LIC) Nepal and National life insurance company limited (NLG) and their individual strength on the basis of their Internal Reports and published Annual Reports. For the purpose, different tools and techniques have been applied to judge the performance of these organizations, drawn out the strength and weakness of the organization and try to prescribe measures to improve the performance of these two life insurance companies.

2. Review of Literature

The studies and evidence were relevant for the further investigation regarding the financial performance of life insurance companies in Nepal. Review of literature are divided into three types;

Conceptual Review: This section consists of the concept, history and types of insurance and presents a review of related books to develop the conceptual framework. The question of the efficiency of the firms in this industry is clearly important to determine how the industry will respond to these challenges and which firms are likely to survive (Berger, A & Goldberg, 2004).

Theoretical Review: It looks at the different approaches to measuring financial performance, the different factors that influence financial performance, and the implications of these theories for the life insurance industry. **Measuring Financial Performance:** Different authors have proposed different approaches to measuring financial performance of life insurance. These include the use of financial ratios, such as the return on equity (ROE), return on assets (ROA), and the price-to-book ratio (P/B). Other authors have proposed the use of financial statement analysis, such as the analysis of the balance sheet, income statement, and cash flow statement.

Empirical Review/Review of Previous Study: This previous study is categorized into two context which is international context and national context.

National Context: In the context of Nepal, stability of insurance sector helps to maintain stability in the economy (Baral, 2005). Likewise, Joshi (2004) found that the liquidity and insurance companies are positively related to insurance profitability. Same as, Maharjan (2007) revealed that the capital adequacy and liquidity is positively associated with the insurance profitability. Similarly, Pradhan and Shrestha (2016) revealed negative relationship between quick ratio and profitability measured in terms of return on equity. Likewise, Poudel (2012) found an inverse impact on banks' financial performance; however, the default rate is the most predictor of bank and financial institutions performance. Financial performance of Nepalese insurance companies; Pradhan & Dahal (2021) have also combined researched this topic. This study examines the financial performance of Nepalese insurance companies. The dependent variables are return on assets and earnings per share while independent variables include insurance premium, firm size, current ratio and solvency ratio. The results shows that insurance premium has positive impact on return on assets and earning per share. It means that increase in insurance premium leads to increase in return on assets and earnings per share. Likewise, firm size has positive impact on return on assets and earning per share. It indicates that increase in firm size leads to increase return on assets and earnings per share. Similarly, current ratio has negative impact on return on assets. It means that increase in current ratio leads to decrease in return on assets. Likewise, solvency ratio has negative impact on return on assets. It indicates that increase in solvency ratio leads to decrease in return on assets. Similarly, current ratio has positive impact on return on assets. It means that increase in current ratio leads to increase in earnings per share. Likewise, solvency ratio has positive impact on earnings per share. It indicates that higher solvency ratio, higher would be the earnings per share. The study also concludes that insurance premium followed by current ratio and firm size is the most influencing factor that explains liquidity management and financial performance of Nepalese insurance companies.

International Context: Sivathaasan, Tharanika, Sinthuja, and Hanitha (2013) have identified capital structure, non-debt tax shield, working capital, growth rate and firm size as factors. They considered Return on Assets (ROA) and Return on Equity (ROE) as proxies for profitability and found out that capital structure and non-debt tax shield have positive and significant impact on profitability. Working Capital and firm size have no significant effect with positive relation while growth rate has a negative and no significant impact. According to Mathuva (2009), there is positive relationship between profitability and liquidity of insurance company in Kenya. Similarly, Bagchi (2013) found that there is a negative relationship between the measures of liquidity management and firms' profitability. Bank's liquidity is positively related to profitability and negatively related to the size of the bank and interest margin (Vodova, 2013). Likewise, Ericsson and Renault

(2005) developed a structural bond valuation model simultaneously capture liquidity and credit risk. The model implies that renegotiation in financial distress is influenced by the illiquidity of the market for distressed debt. Kung (2006) had analysed that the performance of 16 non-life insurance companies. They have chosen 24 financial ratios to be the performance evaluation variables of non-life insurance companies and divided these ratios into five performance indicators, including profitability, operational capability, capital structure, solvency, and management efficiency. The results of GRA have revealed that return on assets ratio, funds utilization efficiency ratio, current debt to capital ratio, equity ratio, and net operating profit to retention premium ratio have the greatest impact on the performance of non-life insurance companies. Increasing operational efficiency directly affects the organization's profitability, efficient businesses are more cost-effective. Any aspect of operational efficiency business types is crucial and must be earned by management for consideration healthy and sustainable financial performance (Sufian. 2007).

Research Gap: Previous studies were performed based on the traditional ratios still some of the major financial indicators of the insurance sector have not been explored such as Solvency Margin Ratio, Current ratio and others variables. This study is a supplement to overcome the weakness and limitation of previous studies. Here, tried to analyze the relationship in life insurance companies between the financial performance and current ratio, Gross premium collected, firm size and solvency ratio. Hence, the gap in the research observed as, “To Analyze and Evaluate the relationship between financial performance tools of Nepal Life, Life Insurance Corporation and National Life Insurance company in Nepal”.

Theoretical Framework for the Study: This study examines the financial performance of top three Nepalese life insurance companies (Nepal life, National life and LIC Nepal). In terms of premium growth and policy holder bonus, these are top three companies leading Nepalese life insurance industry. For the studies, the dependent variables are return on assets and earnings per share while independent variables include insurance premium, firm size, current ratio and solvency ratio.

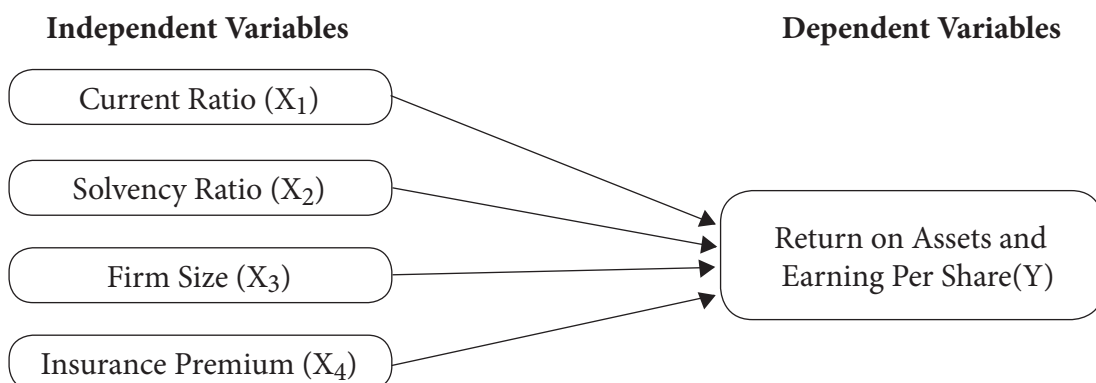


Figure 1: Theoretical framework (Based on literature Review)

3. Research Methodology

The study is based on descriptive and correlational research design. The research designs have been made to describe, explore and analyze the financial performance of selected life insurance companies of Nepal for the period of ten years. Hence, the study shows research is quantitative rather than qualitative.

Population, Sample and source of data : Among the total 19 companies as on date, this studied top three life insurance companies Nepal life, LIC Nepal and National Life with latest 10 years data. Secondary data are collected from published audited yearly financial reports and Bema Samiti reports. In terms of Capital, Profitability, Policy bonus these are the top three life insurance companies in Nepal.

4. Data Analysis Tools, Techniques and Results

In the process of data analysis various financial tools are used for measurement of financial performance of selected non-life insurance in Nepal in order to get the meaningful result and correlation analysis are carried out to examine the relation- ship between operating efficiency and financial performances. Calculation is carried out with the aid of the financial software such as Excel and SPSS.

Earnings Per Share: Earnings per share is the Net income distributable to shareholders divided by number of shares at that particular period. Below tables shows the Minimum value and Maximum value of EPS, Mean, Standard deviation and Coefficient of variance. Value of N is 10 as we have taken date of 10 years.

Table 1 – Descriptive statistics of EPS for selected companies

	N	Min	Max	Mean	SD	CV
Nepal Life	10	12.6	121.51	38.73	31.88	82%
National Life	10	12.82	88.32	32.75	20.49	63%
LIC Nepal	10	-10.05	105.38	38.76	33.35	86%

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 1 shows, there is slightly difference on Mean EPS of LIC Nepal and Nepal life whereas mean value of National life is lower than other two. LIC Nepal, Nepal life and National life has average EPS of 38.73, 32.75 and 32.75 respectively.

The range for EPS is 108, 75 and 115 respectively in Nepal life, National life and LIC Nepal. The range shows that there is highly fluctuation in EPS value. Management efficiency, country's economy, inflation, interest rates, share market's performance, quality of policy, these all are the factors which affects the earning capacity of the insurance companies.

Standard deviation is a statistic that measures the dispersion of a dataset relative to its mean. A volatile stock has a high standard deviation, while the deviation of a stable blue-chip stock is usually low deviation. LIC Nepal has the higher SD of 33.35 which means it is more volatile and unpredictable. Coefficient of variance (CV) is the ratio of standard deviation to its mean. Higher CV shows the higher risky to invest and lower CV shows lower risks to invest. Risk taker investors choose the higher CV stocks whereas risk averse investors choose the lower CV stocks.

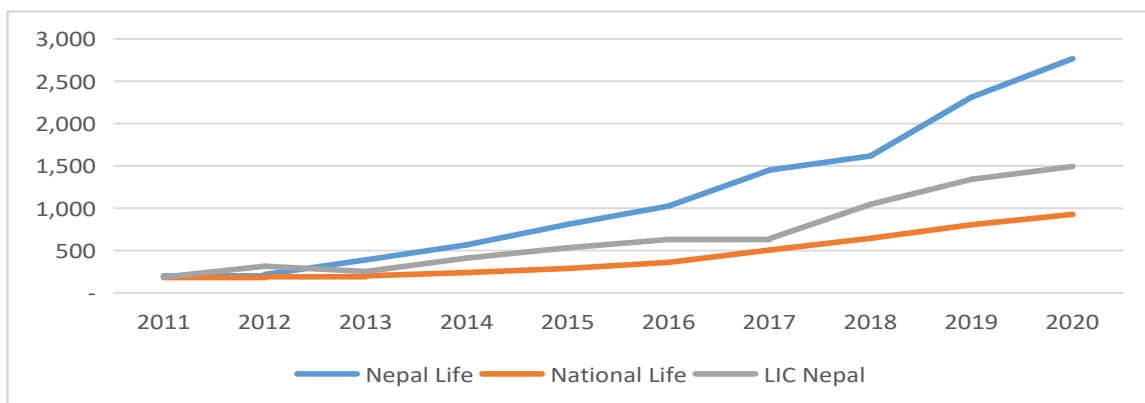


Figure 1 – Earning per share graphs of ten years period from 2011-2020.

Figure 1 depicts the trend Earning Per Share of NLIC, LIC, and NLGI from fiscal year 2010/11 to 2020/21. From the above figure it is clear that, EPS of all three insurance companies have gradually increasing trend. In Fiscal year 2020/21 EPS of NLIC is highest whereas NLGI has lowest EPS. From the above figure, it can be analyzed that all insurance has managed its resources effectively and efficiently in generating profit.

Current Ratio: It is outcome of current assets/current liabilities in terms of times. Generally, two times current ratio is symbol of effective management of working capital and cash in organization.

Table 2 – Descriptive statistics of current ratio for selected companies

	N	Min	Max	Mean	SD
Nepal Life	10	3.15	81.87	27.49	24.65
National Life	10	0.88	46.31	18.88	16.99
LIC Nepal	10	1.57	15.96	5.25	5.12

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 2 shows that, NLIC has highest current ratio of 81.87 times and National life has the lowest current ratio of 0.88 times, whereas LIC Nepal has the average ratio of 5.25 which is better than other two. Excessive current ratio shows the freezing of assets and very less (0.88) is risky for business as it may not fulfil the immediate cash requirement. Keeping buffer stock of current ratio like as 81.87 times, 46.31 times is also losing the opportunity

costs it would be earned some profits if was invested in other assets. NLIC has the high standard deviation of 24.65 times and national life has the 16.99 times. LIC Nepal has maintained minimum of 1.5 times and maximum to 15.96 times. Its mean value is also just 5.25, it shows LIC Nepal has managed cash flow and working capital effectively.

In insurance industries it has no stocks and inventory, premium collected amounts are deposited in banks and most of the fixed deposits also are made in one year time period so that they are counted in short term investments. So that the portion of current assets is high. Major payable amount is claim payable, and re insurance premium payable where in others business trade payable and interest payable is the major payable amounts.

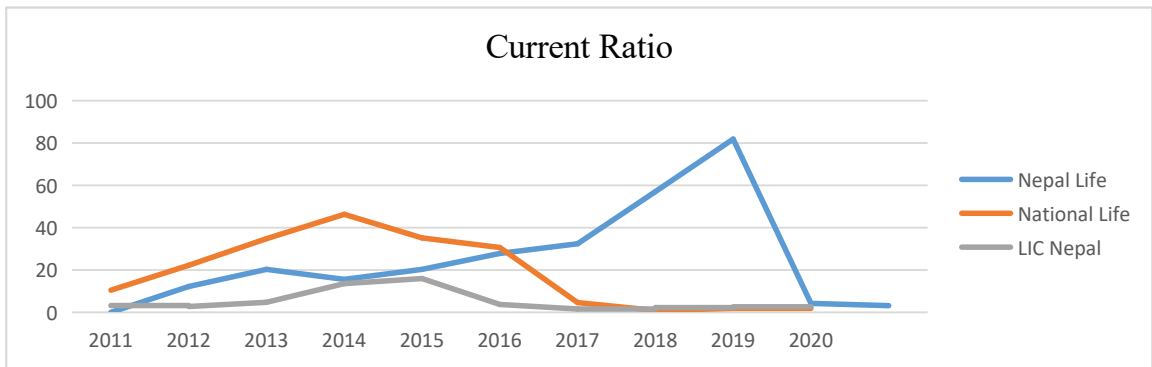


Figure 2: Current Ratio graphs of ten years period from 2011-2020.

Figure 2 depicts the trend Current Ratio of NLIC, LIC, and NLGI from fiscal year 2010/11 to 2019/20. From the above figure it is clear that, CR of all three insurance companies have fluctuating trend. In Fiscal year 2018/19 CR of NLIC is highest whereas in Fiscal Year 2019/20 it is lowest. Similarly, the CR of NLGI is highest in 2013/14 and lowest in 2018/19. From the above figure, it can be analyzed those investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables

Solvency Ratio: A solvency ratio is a key metric used to measure an enterprise's ability to meet its long-term debt obligations and is used often by prospective business lenders. A solvency ratio indicates whether a company's cash flow is sufficient to meet its long-term liabilities and thus is a measure of its financial health.

	N	Min	Max	Mean	SD
Nepal Life	10	0.03	0.53	0.14	0.16
National Life	10	0.06	0.29	0.15	0.09
LIC Nepal	10	0.03	0.08	0.05	0.02

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 3 shows that, LIC Nepal and Nepal life has the minimum solvency ratio of 3% (0.03) and also Nepal life has the maximum of 53% (0.53), there seems greater variability among the different years of data. If we look at average data of ten years NLIC has 14%, NLICL has 15% and LIC Nepal has 5% only. Nepal life has the highest standard deviation of 16% and LIC Nepal has the lower of 2%.

Insurance industries are operated with the principle that all claims would not arise at same times, no accident occurred at same time. In co incident of natural disaster, pandemic situation like COVID – 19 it may happen. Life insurance companies do their reinsurance with different companies to transfer these risks of huge claim at same times.

In life insurance industries only analyzing the solvency ratio derived by total liabilities and equity is not sufficient to make conclusion. There are lots of other’s factors to consider. Some of them are: Life Insurance Fund, Catastrophic Reserve etc:

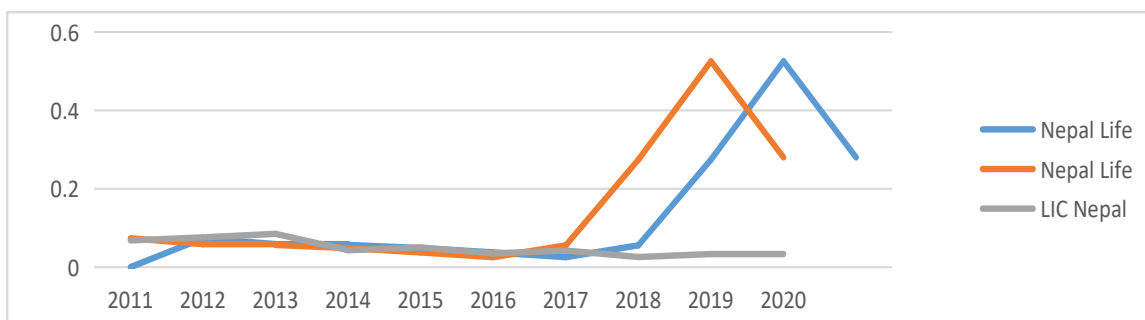


Figure 3: Solvency Ratio graphs of ten years period from 2011-2020.

Figure 3 depicts the trend Solvency Ratio of NLIC, LIC, and NLGI from fiscal year 2010/11 to 2019/20. From the above figure it is clear that, SR of all three insurance companies have average trend at initial phase. In Fiscal year 2016/17 SR of NLGI and NLIC is highest whereas LIC is lowest. From the above figure, it can be analyzed that all company's creditworthiness as well as by potential bond and debenture investors.

ROA (Return on Assets): The ROA figure gives investors an idea of how effective the company is in converting the money it invests into net income. Here, ROA is derived from Net income divided by total assets of the company.

Table 4 – Descriptive statistics of return on assets for selected companies

	N	Min	Max	Mean	SD	CV
Nepal Life	10	0.01	0.2	0.09	0.06	68%
National Life	10	0.03	0.16	0.08	0.05	54%
LIC Nepal	10	-0.03	0.15	0.05	0.04	191%

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Nepal life has highest average ROA 9% with minimum 1% and maximum 20%, National life has average ROA 8% with minimum 3% and maximum 16%, LIC Nepal has average ROA of 5% with minimum negative -0.03% and maximum 15%.

In above data Nepal life has the highest ROA of 20% and also highest average ROA of 9% it seems it has effectively used and invested the resources rather than other two companies. National life has the lowest CV of 54%, it shows that it has smoothly utilized the assets as there is less variability.

Return on assets is depend on profitability and assets size of the company. There may be so many factors which affects the profitability of the companies. Like as management's capacity, management's experience, business/branch expansion strategy, interest rate given by bank, share markets, loan recovery and provisioning, fine/interest waive scheme on renewal. Insurance companies major invest on fixed deposits and share markets. These two elements have major role on affecting the profitability of life insurance companies.

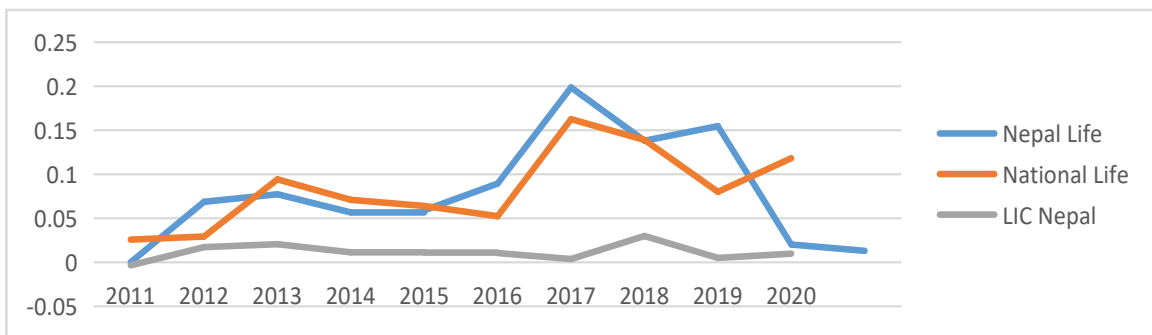


Figure4: Return on Assets graphs of ten years period from 2011-2020.

Figure 4 shows the trend line of Return on Assets in comparing these insurance companies, it appears that NLIC had the highest ROA in 2017/18. However, LIC had the lowest ROA, indicating that it may be gives investors an idea of how effective the company is in converting the money it invests into net income

Total Assets: Total assets are the sum of current assets and fixed assets. Insurance companies' major assets are fixed deposits, balance in current accounts, investment in share and debentures and loan to policy holders and agencies. Some profitable and old companies have their own land and building. Except than investment in shares and agencies loan others are very secured investments and less risky. Investments in share is risky for sometimes if the market gone in bearish trend. Loan to agencies is also risky because if they left the company and went in other companies or deducted the business then problem arises in loan recovery. Below table shows the value of total assets in figure of Crore.

Investment in shares and debentures required to be provisioned for loss if the current market value of the investments is below the purchase price. Similarly, agencies loan also have to be provisioned for loan loss if there is EMI pending for more than three. These figures are in huge so that insurance companies' profitability decreases.

Table 5– Descriptive statistics of total assets for selected companies

Figures in “00000000”					
	N	Min	Max	Mean	SD
Nepal Life	10	714	9951	3194.82	3105.77
National Life	10	323.86	1703.52	902.08	433.09
LIC Nepal	10	731.42	7331.03	3191.95	2229.74

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 5 shows that Nepal life has the highest average value of total assets. It has 3194.82 corer of total assets in average whereas National life has the lowest average total assets of amounting 433.09 corer. Nepal life has the highest standard deviation (3105) and coefficient of variance (97%) which shows it has greatest variability and dispersion in data. The range between minimum value and maximum value is highest at Nepal life.

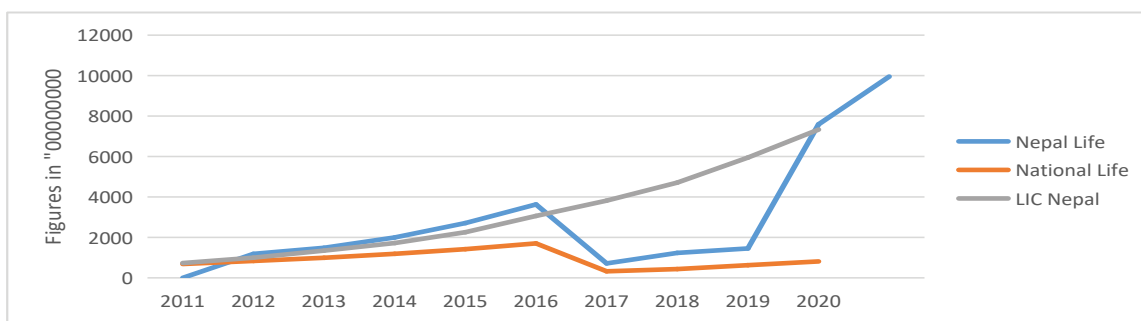


Figure 5: Total Assets graphs of ten years period from 2010-2020.

Figure 5 depicts the trend of Total Assets of NLIC, LIC and NLGI from fiscal year 2010/11 to 2019/20. The above figure shows that all life insurance companies fluctuating trend during the study period. TA in gradually increasing in FY 2010/11 to FY 2014/15 but in FY 2019/20 NLIC has the highest ROA whereas NLGI have lowest.

Insurance Premium:Total Insurance premium includes first premium and renewal premium. First premium is the amount collected from first policy whereas renewal premium is the amount collected from renewal policies. Below table shows the total insurance premium collected during the observed years.

Table 6 – Descriptive statistics of insurance premium for selected companies

Figures in “00000000”					
	N	Min	Max	Mean	SD
Nepal Life	10	200.37	2765.88	1135.41	887.35
National Life	10	190.33	926.75	494.33	277.22
LIC Nepal	10	186.89	1492.39	684.9	457.99

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 6 shows that Nepal life has the highest mean of 1135 with maximum premium collection of amounting 2765 and minimum 200. It has highest standard deviation of 887. Similarly National life has the lowest mean value of 494 with its minimum 190 and maximum 926 of premium collection. All figures are mentioned in Corer. Old and those company whose first business is more succeed have the highest premium collection in subsequent years too.

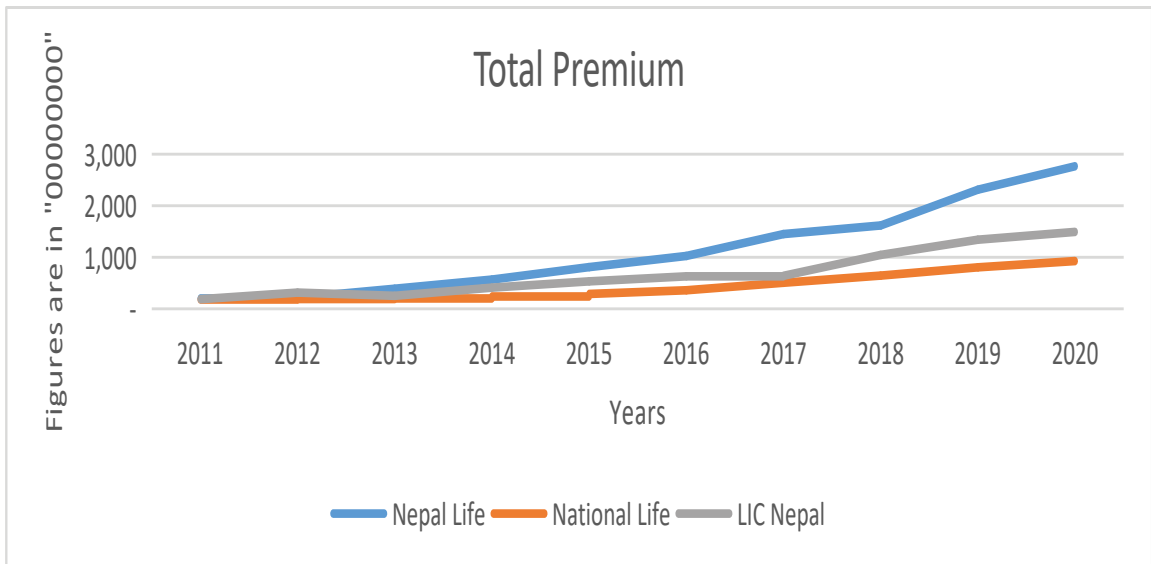


Figure 6: Total premium Collection data graphs of ten years period from 2011-2020.

Figure 6 depicts the trend of Insurance Premium of NLIC, LIC and NLGI from fiscal year 2010/11 to 2019/20. The above figure shows that all life insurance companies is in increasing trend during the study period. IP of NLIC have the highest premium collection during this year whereas NLGI have lowest premium collection in compare to NLIC and LIC.

The following ratio are used to examine and Analyze and Evaluate the relationship between financial performance tools of Nepal Life, Life Insurance Corporation and National Life Insurance company in Nepal as per the objective (ii) 'to examine and Analyze and Evaluate the relationship between financial performance tools of Nepal Life, Life Insurance Corporation and National Life Insurance company' of this research.

Pearson Correlation Coefficient: Correlation coefficients are indicators of the strength of the linear relationship between two different variables, x and y. Below tables shows the relationship between different dependent and independent variables. Earnings per share (EPS) and return on assets (ROA) are the dependent variables, whereas Solvency ratio (SR), Current ratio (CR), Total assets (TA) and Insurance premium (IP) are the independent variables.

Table 7- Correlation matrix between dependent and independent variables

Variables	EPS	ROA	SR	CR	TA	IP
EPS	1					
ROA	0.07	1				
SR	0.22	0.22	1			
CR	0.05	0.51	0.09	1		
TA	-0.05	0.44	0.23	-0.29	1	
IP	0.14	0.03	0.56	0.01	0.77	1

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Table 7 shows that there is positive relationship between return on assets and earning per shares. Increase in return on assets leads to increase in earnings per share too. Negative relationship is seen between Solvency Ratio and Earning per shares. It indicates that increase in solvency ratio leads to decrease in earnings per share. Similarly, there is positive relationship between current ratio and earning per shares, it indicates that increase in current ratio leads to increase in earnings per share also. Total assets have negative relationship with earning per share it indicates that increase in total assets will decrease in earnings per share. Insurance premium has positive relationship with earning per share which indicates that higher the insurance premium, higher would be the earning per share also.

The Positive relationship between Solvency ratio and return on assets also observed, it indicates that increase in solvency ratio leads to increase in return on assets. Current ratio has the positive relationship between return on assets which indicates that higher the current ratio, higher would be the return on assets too. The negative relationship between total assets and return on assets shows that increased in size of the total assets may not leads to increase in return on assets too. Higher the assets lower the return. At last insurance premium has positive relationship with return on assets also, it indicates that increase in collection of premium leads to increase in return on assets too.

Regression Analysis: Having indicated the Pearson correlation coefficient, the regression analysis has been carried out and the results are presented on below tables, more specifically it shows the regression results of insurance premium, total assets, current ratio, and solvency ratio to dependent variable Earning per share and return on assets. Single regression relationship is tested with each dependent and independent variables and their significance relationship is explained below.

Individual Table of Independent Variables

This study has analyzed four independent variables. They are described below individually.

Table 8- Individual Data of Total Assets of selected companies

Variable	Date	Nepal Life	National Life	LIC Nepal
Total Assets	2011	1,185.68	684.75	731.42
	2012	1,485.69	836.07	997.05
	2013	1,997.10	992.63	1,347.32
	2014	2,708.19	1,188.15	1,721.17
	2015	3,630.22	1,418.84	2,256.46
	2016	714.21	1,703.52	3,060.80
	2017	1,233.67	323.86	3,818.20
	2018	1,453.18	434.39	4,709.23
	2019	7,588.44	626.52	5,946.85
	2020	9,951.82	812.05	7,331.03
Total		31948.20	9,020.78	31919.54

Total Assets of ten years period from 2011-2020.

Table 8 shows that, this study has taken data from 2011-2020. In year 2011 there is highest total assets in compare to national life and LIC Nepal. In year 2016, Nepal life have lowest total assets among all insurance company. In compare of total year Nepal life have highest total asset in compare to all insurance company.

Table 9 Individual Data of Current Ratio of selected companies

Variable	Date	Nepal Life	National Life	LIC Nepal
Current Ratio	2011	12.2	10.47	3.20
	2012	20.3	22.21	2.75
	2013	15.6	34.8	4.74
	2014	20.3	46.3	13.56
	2015	27.8	35.2	15.96
	2016	32.4	30.6	3.72
	2017	57.05	4.60	1.57
	2018	81.87	0.88	2.23
	2019	4.22	1.87	2.61
	2020	3.15	1.84	2.12
Total		274.90	188.77	52.47

Current Ratio of ten years period from 2011-2020.

Table 9 depicts that Nepal Life have highest current ratio on 2017 and 2018. We can clearly see that Nepal life insurance have highest current ratio among all the life insurance company. LIC Nepal have lowest current ratio among all the life insurance company.

Table 10- Individual Data of Solvency Ratio of selected companies

Variable	Date	Nepal Life	National Life	LIC Nepal
Solvency Ratio	2011	0.07	0.09	0.07
	2012	0.06	0.09	0.08
	2013	0.06	0.09	0.08
	2014	0.05	0.07	0.04
	2015	0.04	0.06	0.05
	2016	0.03	0.06	0.04
	2017	0.06	0.25	0.04
	2018	0.27	0.29	0.03
	2019	0.53	0.22	0.03
	2020	0.28	0.25	0.04
Total		1.44	1.47	0.50

Solvency Ratio of ten years period from 2011-2020.

Table 10 compare solvency ratio. It depicts that, national life has highest solvency ratio than others. In average, national life have highest solvency ratio among all the insurance company. In year 2019 and 2020 Nepal life have highest solvency ratio than others.

Table 11- Individual Data of Insurance Premium of selected companies

Variable	Date	Nepal Life	National Life	LIC Nepal
Insurance Premium	2011	200	781	187
	2012	217	190	315
	2013	390	201	253
	2014	568	240	411
	2015	809	289	533
	2016	1,026	360	630
	2017	1,450	506	641
	2018	1,617	645	1,046
	2019	2,311	805	1,341
	2020	2,766	927	1,492
Total		11,354	4,943	6,849

Insurance premium of ten years period from 2011-2020.

Table 11 depicts that this study has taken data from 2011 to 2020 Nepal life have highest insurance premium among all insurance company. In average, we can clearly see that there is highest premium collection in all year. Lowest premium collection is made by LIC Nepal in all year.

Regression Result of Earnings Per Share and Solvency Ratio

Regression Statistics								
Multiple R	0.219							
R Square	0.0479							
Adjusted R Square	0.0139							
Standard Error	28.071							
Observations	30							
ANOVA								
	Df	SS	MS	F	Significance F			
Regression	1	1111.09	1111.09	1.41	0.245			
Residual	28	22063.5	787.982					
Total	29	23174.6						
	<i>Coefficient</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
<i>Intercept</i>	42.836	7.25	5.908	0	27.985	57.687	27.985	57.687
SR	-53.708	45.23	-1.187	0.245	-146.357	38.941	-146.36	38.941

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between earnings per share and solvency ratio have significance F-value and P-value 0.245 (24.5%) which is above the 5%, it shows that there is not significance positive relationship between these variables. Significance F-value above 5% indicates that there are not strong relationships between the two variables.

Regression Result of Earnings Per Share and Total Assets

Regression Statistics	
Multiple R	0.0462
R Square	0.0021
Adjusted R Square	-0.0335
Standard Error	28.7385
Observations	30

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	49.381	49.381	0.06	0.809
Residual	28	23125.209	825.9		
Total	29	23174.59			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	38.063	7.517	5.063	0.000	22.665	53.461	22.665	53.461
TA	-0.001	0.002	-0.245	0.809	-0.005	0.004	-0.005	0.004

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between earnings per share and total assets have significance F-value and P-value 0.809 (80.9%) which is above the 5%, it shows that there is not significance positive relationship between these variables. Significance F-value above 5% indicates that there are not strong relationships between the two variables.

Regression Result of Earnings Per Share and Insurance Premium

Regression Statistics	
Multiple R	0.1439
R Square	0.0207
Adjusted R Square	-0.0143
Standard Error	28.4696
Observations	30

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	480.013	480.013	0.592	0.048
Residual	28	22694.577	810.521		
Total	29	23174.590			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	41.661	8.233	5.060	0.000	24.795	58.526	24.795	58.526
IP	0.06	0.008	-0.770	0.048	-0.023	0.011	-0.023	0.011

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between earnings per share and insurance premium have significance F-value and P-value 0.048 (4.8%) which is below the 5%, it shows that there is significance positive relationship between these variables. Significance F-value below 5% indicates that there is strong positive relationships between the two variables.

Regression Result of Earnings Per Share and Current Ratio

Regression Statistics	
Multiple R	0.049
R Square	0.002
Adjusted R Square	-0.033
Standard Error	28.734
Observations	30

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	56.465	56.465	0.068	0.796
Residual	28	23118.125	825.647		
Total	29	23174.590			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	35.504	7.079	5.015	0.000	21.003	50.004	21.003	50.004
CR	0.072	0.276	0.262	0.796	-0.494	0.638	-0.494	0.638

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between earnings per share and current ratio have significance F value and P value 0.796 (79.6%) which is above the 5%, it shows that there is not significance positive relationship between these variables. Significance F value above 5% indicates that there is not strong relationships between the two variables.

Regression Result of Return on Assets and Current Ratio

Regression Statistics	
Multiple R	0.514
R Square	0.264
Adjusted R Square	0.238
Standard Error	0.049
Observations	30

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.024	0.024	10.036	0.004
Residual	28	0.068	0.002		
Total	29	0.092			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.034	0.012	2.804	0.009	0.009	0.059	0.009	0.059
CR	0.002	0.000	3.168	0.004	0.001	0.002	0.001	0.002

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between return on assets and current ratio have significance F value and P value 0.004 (4%) which is below the 5%, it shows that there is significance positive relationship between these variables. Significance F value below 5% indicates that there is strong positive relationships between these two variables. Increase in current ration leads to increase in return on assets too.

Regression Result of Return on Assets and Solvency Ratio

Regression Statistics	
Multiple R	0.221
R Square	0.049
Adjusted R Square	0.015
Standard Error	0.056
Observations	30
ANOVA	
	df
Regression	1
Residual	28
Total	29

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.048	0.014	3.291	0.003	0.018	0.077	0.018	0.077
SR	0.108	0.090	1.197	0.241	-0.077	0.293	-0.077	0.293

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between return on assets and solvency ratio have significance F-value and P-value 0.241 (24.1%) which is above the 5%, it shows that there is not significance positive relationship between these variables. Significance F value above 5% indicates that there are not strong relationships between the two variables.

Regression Result of Return on Assets and Total Assets

Regression Statistics	
Multiple R	0.441
R Square	0.195
Adjusted R Square	0.166
Standard Error	0.052
Observations	30

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	0.018	0.018	6.765	0.015
Residual	28	0.074	0.003		
Total	29	0.092			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.085	0.013	6.302	0.000	0.057	0.113	0.057	0.113
TA	0.000	0.000	-2.601	0.015	0.000	0.000	0.000	0.000

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between return on assets and current ratio have significance F-value and P-value 0.015 (1.5%) which is below the 5%, it shows that there is strong positive relationship between these variables. Significance F value below 5% indicates that there is strong positive relationships between these two variables. Increase in total assets leads to increase in return on assets too.

Regression Result of Return on Assets and Insurance Premium

Regression Statistics	
Multiple R	0.029
R Square	0.001
Adjusted R Square	-0.035
Standard Error	0.057
Observations	30

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.000	0.000	0.023	0.880
Residual	28	0.092	0.003		
Total	29	0.092			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.058	0.017	3.487	0.002	0.024	0.092	0.024	0.092
IP	0.000	0.000	0.152	0.880	0.000	0.000	0.000	0.000

Source: Calculated by Researcher from Annual Reports of Selected Insurance Companies from 2011 to 2020.

Regression relationship between return on assets and insurance premium have significance F value and P value 0.880 (88%) which is above the 5%, it shows that there is not significance positive relationship between these variables. Significance F value above 5% indicates that there are not strong relationships between the two variables.

Findings of the Study: The below shows the major finding of story related to objective (i) ‘To identify the financial performance of Nepal Life, LIC Nepal and National Life Insurance Company.’ Among all these three-life insurance company LIC Nepal has the highest mean EPS of 38.76 whereas National life has the lowest of 32.75. A volatile stock has a high standard deviation, while the deviation of a stable blue-chip stock is usually low deviation. LIC Nepal has the higher SD of 33.35 which means it is more volatile and unpredictable. Coefficient of variance (CV) is the ratio of standard deviation to its mean. Higher CV shows the higher risky to invest and lower CV shows lower risks to invest. Risk taker investors choose the higher CV stocks whereas risk averse investors choose the lower CV stocks. NLIC has highest current ratio of 81.87 times and National life has the lowest current ratio of 0.88 times, whereas LIC Nepal has the average ratio of 5.25 which is better than other two. Excessive current ratio shows the freezing of assets and very less (0.88) is risky for business as it may not fulfil the immediate cash requirement. Keeping buffer stock of current ratio like as 81.87 times, 46.31 times is also losing the opportunity costs it would be earned some profits if was invested in other assets

Similarly, the following are the discussion based on the objective (ii): ‘To Analyze and Evaluate the relationship between financial performance tools of Nepal Life, Life Insurance Corporation and National Life Insurance company in Nepal.’ At first, here solvency ratio is decrease by 0.22% and there is increment in EPS by 1%. Likewise, 0.05% increment in Current Ratio and EPS is also increased. When Total Asset is decreased by 5%, EPS is also increased by 1% and coming to the Insurance Premium 0.14% increment in insurance premium there is also increment by 1% in EPS. From this, we can understand that there is strongly positive relationship is seen between earning per share and return and assets. These both are the assumed as dependent variables of financial performance for this study. Secondly, when solvency ratio is increased by 22% Return on Assets is also increased by 1%. When Total Assets is decreased by 0.44% ROA is increased by 1%, likewise, when current ratio is increased by 0.51% ROA is also increased by 1%, and more over when Insurance Premium is increased by 3% ROA is also increased by 1%. From this we can understand that there is there is negative correlation between earning per share

and solvency ratio. Beta coefficients for these two variables' regression is also negative. Increase in solvency ratio leads to decrease in EPS.

5. Conclusions

Nepal Life exhibits the highest average ROA of 9%, effectively utilizing resources, while National Life's low CV of 54% indicates stable asset use. LIC Nepal holds an average current ratio (5.25), balancing liquidity better than others. NLIC's high current ratio (81.87) implies frozen assets, contrasting with National Life's risky low ratio (0.88). High standard deviations: NLIC (24.65) and national life (16.99). LIC Nepal effectively manages cash flow (1.5-15.96 times) with a mean of 5.25. Nepal Life exhibits wider solvency ratio variation (3%-53%), while LIC Nepal has high volatility (33.35 SD) compared to Nepal Life's lower 2%.

Coefficient of variance (CV) reflects investment risk: higher CV implies higher risk and vice versa, guiding investors' choices. In analyzing financial tools' relationships, Nepal Life's highest average total assets (3194.82) contrast National Life's lowest (433.09). Nepal Life's assets exhibit high variability (SD 3105, CV 97%), while Insurance Premium indicates Nepal Life's higher mean (1135) and variability (SD 887) compared to National Life's lower mean (494) and stability.

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