

LIQUIDITY AND PROFITABILITY OF LIFE INSURANCE COMPANIES IN NEPAL

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Submitted By

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CERTIFICATES OF AUTHORSHIP

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

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

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REPORT OF RESEARCH COMMITTEE

Ramila Phuyal has defended research proposal entitled "**Liquidity and Profitability of Life Insurance Companies in Nepal**" successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Bhoj Raj Ojha and submit the thesis for evaluation and viva voce examination.

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We have examined the dissertation Analysis on Liquidity and Profitability of Life Insurance Companies in Nepal presented by Ramila Phuyal for the degree of **Master of Business Studies** (MBS). We hereby certify that the dissertation is acceptable for the award of degree.

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ABBREVIATIONS

ALICL	:	Asian Life Insurance Company Limited
CA	:	Current Assets
CV	:	Coefficient of Variation
CL	:	Current Liabilities
CR	:	Current Ratio
CsR	:	Cash Ratio
i.e.	:	That is
LICL Ltd.	:	Life Insurance Corporation (Nepal) Limited Limited
MetLife	:	American Life Insurance Company Limited
NALIC	:	National Life Insurance Company Limited
NELIC	:	Nepal Life Insurance Company Limited
P.E.	:	Probable Error
QR	:	Quick Ratio
r	:	Correlation
ROA	:	Return on Assets
ROE	:	Return on Equity
S.D	:	Standard Deviation
TA	:	Total Assets

ABSTRACT

In this study, the link between life insurance company's liquidity and profitability during the years 2013/2014 to 2022/23 is examined. The research covers five of the fourteen life insurance companies that are listed on the Nepal insurance board. The research employed secondary data. Data and information were gathered from the Nepal insurance board and selected life insurance companies annual reports. The study's conclusions were supported by financial instruments, multiple regression analysis, correlation analysis, and descriptive statistical analysis. ROA and ROE were used to gauge profitability, whereas current ratio, quick ratio and cash ratio were used to measure liquidity. The statistical program for social science SPSS software, version 25, was used to conduct the analysis.

Based on the findings Nepal life insurance companies have an excessive amount of money but no stability. The current ratio, quick ratio and return on assets have a negative connection which shows that a rise in the liquidity ratio will result in an decrease in the return on assets. The association between cash and return on assets is also positive and substantial indicating that as cash increases, return on assets also increases. The liquidity ratios are insignificantly correlated with return on assets. There is a negative association between the current ratio and cash ratio with return on equity however it is insignificant at 0.05 levels. The quick ratio and return on equity have a positive association, indicating that a higher liquidity ratio decreases return on equity and it is significant at 0.05 levels. Return on equity is only marginally impacted by changes in liquidity. Cash Ratio and return on equity are positively correlated and significantly correlated.

Keywords: *Liquidity, Profitability, Return on Assets, Return on Equity, Current Ratio, Quick Ratio, Cash Ratio*

CHAPTER I

INTRODUCTION

1.1 Background of the study

Liquidity management is critical for any firm since it involves paying current commitments on business, which consist of short-term operating expenses and maturing long-term debt. In any firm, liquidity ratios such as the current ratio, quick ratio, and acid test ratio are used to manage liquidity. These ratios have a significant impact on the organization's profitability. By comparing cash and near-cash with payment commitments, the firm has adequate liquid assets (cash, bank) to satisfy the payment schedule. A company's cash and near-cash assets, together referred to as "current" assets, are taken into account by liquidity ratios, along with its immediate payment obligations, or current liabilities, on the other side. Close to cash assets mostly consist of customer receivables and inventory of completed items and raw materials. Payment responsibilities include supplier payments, operations as well as immediate financial obligations and overdue debt installments. Campello (2002) investigated the function of internal liquidity markets and risk sharing inside banking institutions to buffer external financing shocks, building on the work of Williamson (1985) and Stein (1997).

The capacity to satisfy expected and unexpected monetary demands is referred to as liquidity. It is the ability of a business to meet the financial obligations of its policy and contract holders without suffering any loss, let alone significant loss. Both the assets and liabilities of a corporation affect its liquidity profile. The financial services business is rife with liquidity risk, which must be understood, measured, monitored, and managed. Liquidity management is divided into layers. There is daily cash management, which is often handled by a company's treasury department. Ongoing cash flow management is used to monitor cash requirements during the next six to twenty-four months. Thirdly liquidity management category handles the stress liquidity risk, which is centered on the catastrophic risk. This conduct is more prevalent in banks with a sizable worldwide footprint because it enables them to transfer money across nations that experience various unrelated shocks (Cetorelli and Goldberg, 2012).

Profitability is one of the primary objectives of every firm. A firm cannot exist unless it is lucrative, and it is difficult to grow if it is not profitable. A firm needs short-term money to meet its day-to-day operations and other demands in order to produce profit. When the

short-term requirement for capital is created by business operations rather than by external obligations, the business will be more lucrative. Management may benefit by utilizing all of the market's available resources. According to Hayward and Upton, "profitability is the ability of a given investment to earn a return from its use." Nevertheless, "efficiency" and "profitability" are not interchangeable notions. Profitability is an efficiency indicator that is utilized as a management tool to increase efficiency and as a gauge of effectiveness. While profitability is a crucial metric for assessing effectiveness, it should not be used as a conclusive confirmation in terms of effectiveness. Most notably, the management of any firm should look into and prioritize addressing issues related to profitability and liquidity. Additionally, profitability reveals how well banks are doing in a certain environment. In particular, it reflects the bank's 2008 risk management abilities, shareholder conduct, and management caliber (Aburime).

Profitability and liquidity are two essential variables that provide information about a company's success. Profitability and liquidity should run parallel for long-term survival and good expansion. The capacity of a company to satisfy its short-term obligations is referred to as liquidity. Liquidity is essential to the effective operation of a business. Because of its tight association with day-to-day company operations, a study of liquidity is critical for both internal and external analysts (Bhunja, 2010). Insufficient liquidity poses a risk to a company's solvency and profitability, rendering it unstable. The margin by which a business's revenues exceed its associated expenses is known as profitability.

Dividends and stock price growth are the two main concerns of potential investors, thus they pay greater attention to profitability ratios. Managers, on the other hand, are more concerned with gauging operational success regarding profitability. Consequently, a low profit margin signals poor management, which makes investors hesitant to put money into the company. In most decisions made by the finance manager, the liquidity and profitability goals are incompatible. For example, the business may be able to boost its sales by adhering to credit policy, but its liquidity may deteriorate. In addition, the risk-return theory holds that there is a direct correlation between risk and return. As a result, companies with great liquidity may have little risk and hence low profitability. In contrast, a business with little liquidity may confront considerable risk, resulting in a larger return. Because of this, a company's daily activities need to balance profitability and liquidity.

As stated by Jordan, Westerfield, and Ross (2007), liquidity and profitability have a negative connection. As a result, managers have a difficulty in balancing the two, necessitating a compromise between high levels of net working capital and optimizing profitability. The liquidity-profitability trade-off is the term for this. This conundrum would emerge from the fact that high current asset values typically result in maintenance costs as opposed to immediately enhancing the company and generating profitability. Panigrahi (2012) asserts that while current assets are liquid, holding more of them denotes great liquidity; nevertheless, current assets contain goods such as cash, which reduce business profitability. Therefore, this study is concerned with liquidity and profitability.

1.2 Statement of the problem

If sufficient liquidity is maintained, money cannot be used for operational purposes or invested for higher returns; instead, it must be confined to liquid assets. Thus, maintaining such liquid assets comes with an opportunity cost., which may have an impact on the firm's overall profitability. In other words, increasing profitability tends to lower firm liquidity, while focusing too much on liquidity tends to damage profitability (Smith, 1980). As a result, businesses should constantly strive to achieve a balance between the competing goals of liquidity and profitability. Liquidity for the company shouldn't be excessively high or low. The buildup of idle money that don't generate any revenue for the company is a sign of over reliance on liquidity (Smith, 1980). On the other side, a lack of liquidity might harm the company's reputation and credit standing, which could compel the company to liquidate its assets. In order to determine the link between liquidity and profitability of listed insurance companies in Nepal, the current study was started.

Profitability and liquidity are mutually exclusive; increasing one typically entails reducing the other. For instance, if the five elements on a company's balance sheet cash, marketable securities, accounts receivables, inventory, and fixed assets are listed in order of decreasing liquidity, It is evident that there is less liquidity when fixed assets are substituted for cash. However, moving from fixed assets to cash increases profitability.

Although profitability and liquidity were shown to be positively correlated by Shrestha (2018), the study's results were not statistically significant. According to Lartey, Antwi, and Boadi (2013), the profitability and liquidity of Ghana's listed banks have a very shaky positive connection. According to Erasmus (2010), profitability is negatively impacted by liquidity. Eljelly's (2004) empirical investigation of the connection between profitability

and liquidity revealed a significant and adverse link between the two. Theoretical research of the relationship between profitability and liquidity makes it clear that the two variables should have a negative correlation. But, empirical data indicates contradictory findings, with some findings indicating a negative association and others indicating a positive relationship or none at all.

The goal of the current study is to determine the connection between life insurance businesses' liquidity and profitability in Nepal. Below is a list of the primary concerns that have been identified for the purposes of this study.

- i. What is the profitability and liquidity condition of life insurance companies in Nepal?
- ii. How does liquidity impact profitability for life insurance companies in Nepal?
- iii. Does liquidity influence the profitability of life insurance companies in Nepal?

1.3 Objectives of the study

The general objective of this study is to analysis on liquidity and profitability of life insurance companies in Nepal. The precise aims are,

- i. To evaluate the profitability and liquidity of chosen Nepalese life insurance companies.
- ii. To investigate the link between liquidity and profitability at selected Nepalese life insurance companies.
- iii. To examine how liquidity affects a profitability of selected Nepalese life insurance companies.

1.4 Rationale of the study

Despite the fact that the specifics of the relationship between liquidity and performance may vary by industry, it cannot be denied that such a relationship exists. Better profitability and effective management of liquidity depend heavily on managerial viewpoint. According to Manyo and Ogakwu (2013), positive liquidity and performance growth are useful indicators that influence stakeholders' behavior. A declining trend in profitability points to a subpar liquidity management plan. The purpose of this study is to define the type of relationship that exists between liquidity and profitability characteristics. The thorough formulation of trade policy will be aided by this identification. Additionally, this study will assist management in understanding the most

crucial elements that must be carefully considered in order to make wise choices for improved handling of issues with profitability and liquidity.

Since the research would provide information on new strategies for managing liquidity to boost profitability, the management of companies listed at the Insurance Board would benefit from it. Due to poor liquidity management, several businesses have failed. The study would also assist in reinforcing the necessity of effective and efficient management of liquidity to the many business sectors represented by companies listed with the Insurance Board with the goal of boosting earnings.

1.5 Limitations of the study

The limitations of this study are as attested below,

- i. There are just a few statistical and financial tools available (such as multiple regression and the ratio analysis, mean, CV, and correlations).
- ii. The profitability ratios (ROA and ROE) and other liquidity ratios (quick ratio, current ratio, and cash ratio) are included in this study.
- iii. For this study, a sample of just 5 life insurance companies is chosen.
- iv. The research period only covers the ten fiscal years 2013/14 to 2022/23. Running multiple regressions does not include conducting normality or multicollinearity tests.

CHAPTER II

REVIEW OF LITERATURE

This part covers a brief review of previous and current empirical investigations that are pertinent to the topic of this study. Researchers have long been interested in the investigation of the connection between liquidity and profitability of Nepalese life insurance companies. Numerous researches on this subject have been conducted in both developed and emerging economies. The section of the literature review has generally been divided into the following elements. The identification of essential concepts and their relationships are covered in this section of the research. This article discusses how listed insurance company profitability is determined. Also covered is the connection between profitability and liquidity.

2.1 Theoretical review

An organization was founded with certain objectives in mind. It has goals of its own. The organization's aim should be made clear in order to attain its goals. Whether for private or public profit, an organization is necessary in our cutthroat, globally integrated economic age. Profit is the outcome of effective management, not random luck. Certain managerial duties must be carried out consistently in order to manage an organization. All of these duties together are frequently referred to as the management function. Major management tasks include organizing, staffing, managing human resources, leading and influencing others, and controlling. The process of creating an organization's goals and deciding on a future course of action in advance is called planning. Controlling entails comparing the firm's actions to the plan and determining what has to be done in the event that the plan is not being adhered to (Lynch William, 1995, P18). Trade union representatives, government officials, investment analysts, suppliers, lenders, bankers, managers, owners, and clients are just a few examples of the people that work for business organizations. For the purpose of making decisions, each of these parties needs different information. The financial statement provides information about the companies' actual condition. It provides a clear image of the balance sheet, profit and loss situation, and other business information. These are insufficient to gauge the plan and performance of the company. The financial performance may be measured, analyzed, and different strategies can be determined in management accounting using a variety of tools and techniques. One of the most important and often used methods for examining a

company's financial statements is liquidity analysis. It is among the crucial components of the liquid regulating system of the controlling corporation.

2.2 Concept of liquidity

As companies strive to maximize their working capital, liquidity management has emerged as a crucial component of cash flow management. It is crucial to comprehend what liquidity is and how it may be managed properly because more businesses are now running on slim profit margins. However, what really is liquidity? The term "liquidity" describes a company's capacity to satisfy both short-term and long-term commitments, such as making wages and paying bills, as well as to increase capital. The flow of cash through a business is what keeps it operating. If an enterprise lacks sufficient cash to meet its obligations, it will have to take out loans or sell assets to get the necessary funds. The organization may potentially go out of business as a result of this predicament, which can be challenging and expensive. Businesses may guarantee that they may avoid taking on debt or selling assets at a loss by effectively managing their liquidity, which allows them to have the cash on hand to pay for obligations. The proactive practice of making sure a business has enough cash on hand to satisfy its financial commitments when they become due is known as liquidity management. As it directly affects a company's working capital, it is a crucial aspect of financial performance. The gap between a company's current assets and liabilities is referred to as working capital. A business is in excellent financial health if it has a positive working capital ratio, which indicates that it has more assets than liabilities. A negative working capital, on the other hand, shows that a company is in risk of not meeting its financial obligations and has more liabilities than assets. This procedure might consist of:

- **Cash forecasting:** Businesses may take measures to guarantee they will have the appropriate finances on hand when those demands emerge by anticipating their future financial needs. To do this, you might need to take out a loan or credit line or boost sales to bring in additional money.
- **Overseeing investments and short-term debt:** It is essential to the business for manage both its short-term debt and investments if it wants to have a sustainable cash flow. This entails paying obligations on time and keeping a tight eye on assets to make sure they are operating since anticipated.

- **Evaluating credit lines:** A credit line can be used as a source for funds in times of need, such as sudden costs or transient cash flows issues.
- **Streamlining the procedures for accounts payable and receivable:** In order to assure on-time payment, an efficient liquidity management plan entails optimizing the billing and collection processes and, when feasible, taking advantage of early payment discounts.

Although it is an essential component of financial management, liquidity management is not a precise science. When predicting the future and selecting strategies for managing a company's cash flow, there will always be some degree of uncertainty. Businesses may reduce the risk of missing other payments by being proactive and having a strategy in place. They can also make sure they have enough cash on hand to cover both their immediate and long-term demands (<https://www.investopedia.com>).

2.2.1 Types of liquidity

Understanding the various forms of liquidity is crucial when a firm is developing its strategy for managing liquidity to make sure that every need set out by the business is met.

- **The Liquidity of Assets:** If the asset can be swiftly and readily turned into cash without suffering a substantial loss, it is said to be liquid. Comprising cash and investments in short-term debt instruments, liquid assets are readily available for use.
- **Market liquidity:** When a market is very liquid, there are numerous buyers and sellers, and asset values are often steady. When making financial decisions, market liquidity is crucial since it affects how simple it will include buying or selling an asset.
- **Liquidity Accounting:** The capacity of the business to cover its ongoing operating expenditures, such as payroll and inventory charges, is referred to as accounting liquidity. Due to the direct influence it has on a company's solvency, this form of liquidity is the most crucial.

2.2.2 Assess tools of liquidity

Liquidity ratios are frequently used by financial analysts to evaluate a company's liquidity. These ratios contrast the current assets and liabilities of a business.

- **Current ratio:** This ratio evaluates how well a corporation can use its present assets to cover its short-term debts. Calculating a company's liquidity by dividing its current assets by its current liabilities is the quickest and most used method.
- **Quick ratio:** It is similar to the current ratio in that inventory is not included. Since it can take some time for inventory to be turned into cash and because cash might not always be available to meet urgent obligations, in the computation of current assets. By dividing a company's current liabilities (cash plus securities plus accounts receivable) by its current assets, one may get the quick ratio.
- **Cash ratio:** This ratio assesses how well a business can use its cash and cash equivalents to pay its short-term obligations, which are its most liquid assets. By dividing a company's cash and cash equivalents by its current obligations, the cash ratio is determined.

2.3 Concept of profitability

The profitability ratio is the result of several company strategies and activities. It measures how well the business is handled and operated. The financial health of the firm is a concern for its owners, management, and creditors. The bank's financial performance is fundamentally summarized by its profitability ratio. The formation, operation, and administration of a bank are all done with the intention of making money by providing financial services to customers.

A company's principal goal is to generate at least a respectable return on the capital put in it while maintaining a stable financial position. A satisfactory return relies on a number of variables, such as the type of business risk involved, among others. If a business is unable to turn a profit, invested money is depleted, and if this condition persists, the business may eventually go out of business.

A company's ability to make money is shown by its profitability, which also tends to increase its ability to generate income. In both industrialized and developing nations today, profitability analysis has surpassed other factors that are emphasized in the interpretation of financial accounts. Profitability analysis is both internal and external, although financial analysis is more external than internal.

Critically examining and comprehending the present and future earning potential of commercial enterprises is made easier with the aid of profitability analysis. When managers

and other employees in the company have an earning objective to assist direct their behavior, it becomes even more crucial. It also aids several governmental organizations in sustaining the financial stability of a specific corporate concern by its net earnings, as well as bondholders, shareholders, potential investors, bankers, and other creditors.

Typically, common-size statements are scaled-down versions of the originals. When analyzing a company's present financial situation and operating outcomes, especially when comparing businesses within the same industry over time and businesses within a single year, these statements are most helpful to an analyst.

2.3.1 Types of profitability

Gross profit margin: The amount of money that remains after subtracting the cost of items sold is determined by the gross profit ratio. Large gross margins are necessary because they allow a business to produce a bigger net profit. In contrast, a low gross profit margin is a sign of the company performing poorly, possibly as a result of low sales, high production costs, an unfavorable market situation, etc. Higher gross profit margins show that the company is able to cover expenses like fixed costs, operating expenses, depreciation, etc. and is able to generate income over and above these expenses.

Operating profit margin: The proportion of profit an organization makes from its entire revenue before subtracting interest and taxes is known as operating profit margin. This accurately portrays the effectiveness of the business's activities. The ratio varies by industry and is used to compare a company's performance to that of other businesses in the same sector. It may also be used as a benchmark to compare a firm's performance to others and to highlight the need for advancement in a certain area for increased effectiveness within the organization.

Net profit margin: The net profit margin shows how much of each rupee in revenue that the firm receives is transformed into net profit. It is one of the most significant measures of a company's financial health. A corporation may evaluate the effectiveness of new strategies or processes and implement the ones that show to be successful by measuring changes in the net profit margin over time. To evaluate a company's performance in comparison to its rivals, this ratio can be compared to industry norms.

Return on equity: This ratio gives an indication of how well the firm is using the capital that its shareholders have placed in it. In other words, it is a measurement of the income

generated by the company for each rupee of shareholder stock invested. The corporation is better able to manage to create returns on its equity financing when the return on equity is higher. This method helps to clearly comprehend the financial efficiency and the efficiency of using largely concrete resources instead of intangible ones, which shows to be very helpful when comparing enterprises in the same sector.

Return on assets: Profit to sales ratios are a useful operational statistic, but comparing earnings to the resources a firm uses to produce them reveals if it will be able to survive. The return on assets is the most straight forward of these business efficiency indicators. This ratio evaluates the company's profitability in relation to the assets it employs to produce profits. The effectiveness of the corporation in managing its balance sheets and generating profits increases with higher ROA, whereas a lower ROA suggests room for development.

Return on capital employed: Return on Capital Employed (ROCE), a profitability statistic, measures how efficiently a company uses its capital to generate profits. Investors commonly assess a company's investment potential using the return on a capital-employed metric. The operational revenue generated per dollar of invested capital is measured by the return on capital employed. A greater ROCE is often preferred since it demonstrates that much more earnings are generated per dollar of capital invested (www.investopedia.com).

2.4 Empirical review

Davronov (2016) conducted research on the liquidity management practices used by commercial banks in Uzbekistan. It also provides a discussion and classification of theoretical methods to the management of liquidity in commercial banks. He also developed the fundamental guidelines for the process of managing liquidity. Additionally, it suggests and presents the outcomes of testing an ARIMA-based mathematical model for the study and forecast of bank cash flows. It should be highlighted that the model suggested in the article is not completely capable of optimizing bank activities and reducing risks associated with liquidity management. On the other hand, it has to do with the fact that the bank projects its future cash flows with a certain degree of certainty.

Based on correlation and regression research, Khan and Ali (2016) found a substantial positive association between bank profitability and liquidity. Analysis was conducted using secondary data that was taken from Habib Bank Limited's annual statements for the previous

five years (2008–2014). Using panel data from 575 listed and non-listed Eurozone banks using an OLS regression model, Cucinelli (2013) discovered that there is no long-term, meaningful correlation between liquidity and default probability. Using data from five Islamic banks from 2001 to 2011, Rasul (2013) discovered that the ratio of cash and due from banks to total deposits is negligible with ROE but large with ROA.

Wambui and Wanjim (2016) analyzed how credit risk affected the corporate liquidity of Kenya's deposit-taking microfinance institutions (DTMs). All nine DTMs in Kenya were included in the study's sample. The information for the study was gathered from secondary sources between 2011 and 2013. The strength of the association between the variables was assessed using regression analysis. According to the study's findings, Kenyan deposit-taking microfinance institutions' corporate liquidity is strongly impacted by credit risk, with this impact being statistically significant.

Coleman et al. (2017) investigated by used a fresh branch-level dataset of Brazilian banks to explain the patterns of internal liquidity management and their impact on bank lending. The findings imply that internal liquidity management becomes more sophisticated under financial strain. When there is a liquidity shock, privately held banks are the most affected, and they raise their internal financing levels to continue branch lending while their government-owned rivals take a more calculated approach. Private and public banks enhance funding for their branches in densely populated and hazardous locations. Due to the continued high sanity of lending to internal financing following the liquidity shock, this money results in increased lending. Overall, the research offered branch-level proof of how banks ration internal liquidity, both normally and under stress, and how this impacts bank lending.

Ojha (2018) investigated the structure and behavior of liquidity in Nepalese commercial banks, as well as the rate of inflation, non-performing loans (NPL), return on assets (ROA), capital adequacy ratio (CAR), return on equity (ROE), GDP, and interbank rate. The main conclusions indicated a strong correlation between a variety of characteristics and how well Nepalese commercial banks perform in terms of liquidity. The research has utilized panel data from commercial banks spanning from 2010/11 to 2016/17. The diagnostic tools employed to suit the specific study aims include mean, standard deviation, correlation, and

multiple regression analysis. The main finding of the study is that Nepalese commercial banks' liquidity is negatively impacted by return on equity, return on assets, nonperforming loans, and interbank rates. The study also finds that inflation, GDP, and CAR have a favorable effect on Nepalese commercial banks' liquidity.

In order to better manage and reduce this important financial risk, Shamas, Zainol, and Zainol (2018) investigated the relationship between certain drivers and proxies for liquidity risk, such as cash to total assets, in Bahraini Islamic Banks (IBs). Using panel data analysis, seven Bahraini IBs were selected to represent the country's Islamic banking industry from 2007 to 2011. Based on idiosyncratic considerations, the econometric results show that Bahraini IBs' liquidity risk is contingent. The relationship between liquidity risk and return on average assets (ROA) was discovered to be positive. Liquidity risk is, however, adversely and considerably impacted by non-performing loans (NPLs) and the capital adequacy ratio (CAR). Finally, there is a weak and negative correlation between liquidity risk and bank size and the financial crisis.

The capital structure and company efficiency of non-financial entities were studied by Jaishi and Poudel (2019). Their analysis demonstrated that less efficient businesses employ less leverage, whereas more efficient firms utilize larger leverage. Similar research was done by Jaishi (2020) on the capital structure and how it affects insurance businesses' financial results. It demonstrated that insurance firms with higher debt ratios have more stable financial results. Additionally, a rise in the debt-to-asset ratio as well as a tangible improvement in profits per share and return on assets were highlighted. An investigation on leverage and performance in the hotel sector was carried out in the US by Gomez et al. in 2021. The study found that leverage had a considerable detrimental effect on company efficiency and that the hospitality sector was heavily leveraged.

Bencharles, and Abubakar (2020) conducted a comparative study on liquidity management's effects on the profitability of conventional and Islamic banks in Nigeria. From 2012 to 2019, the study looks at how liquidity management affects the profitability of conventional and Islamic banks in Nigeria. The conventional and Islamic banks in Nigeria were represented by First Bank Plc and Jaiz Bank, respectively. The study's source for time series data was the quarterly bulletin of a few chosen banks. To determine the background

features of the dataset, the unit root test, co-integration test, and descriptive statistics were first applied to the time series data in order to do a preliminary analysis. The link between liquidity and profitability was estimated using the ordinary least squares method. Using bank size as a control variable, liquidity was assessed utilizing the cash ratio, current ratio, and liquid asset to total asset ratio (LATA). The profitability was measured using return on assets. Because empirical findings showed that in both conventional and Islamic banks, profitability and liquidity had an adverse connection, the risk return trade-off was shown to be accurate. However, it was found that compared to conventional banks, Islamic banks' profitability reacted more sharply to changes in the amount of liquidity. Although liquidity was shown to be more important in Islamic banks, the study found that the relationship between liquidity and profitability matched the risk return hypothesis. Accordingly, the report encouraged banks to only have as much cash on hand to cover their declared liabilities and to avoid holding onto liquidity unnecessarily because doing so reduces bank profitability.

Wuave, Yua, and Yua (2020) studied how the financial performance of Nigerian banks was affected by liquidity management. The financial performance of Nigerian banks is examined in this study from 2010 to 2018 in relation to liquidity management. Secondary data from five banks listed on the Nigerian stock market is used in the study. Although return on assets (ROA), return on equity (ROE), and return on net interest margin (NIM) are proxies for financial performance (profitability), liquidity management is proxied by liquidity ratios (LQR), loan to deposit ratios (LDR), cash reserve ratios (CRR), and deposit ratios (DR). The Hausman test and panel regression analysis are used in the study to estimate the model and select between the fixed effect and random effect models. According to the study, the liquidity ratio (LQR) significantly and favorably affects DMB's financial performance as determined by net interest margin (NIM), return on equity (ROE), and return on assets (ROA). Consequently, it advises Nigerian banks to set up sound governance and risk management frameworks by developing strategies, policies, and procedures for managing liquidity that are effectively incorporated into their risk management practices. It also advises them to develop a contingency funding plan to handle any liquidity shortage during emergencies or stressful times while ensuring that active monitoring of liquidity funding requirements prevents any liquidity issues that might lead to an economic crisis.

Obim, Takon, and Mgbado (2020) investigated the "Impact of Liquidity on Bank Profitability in Nigeria." The study looked at how banks' profitability is affected by liquidity. The goal of the study was to determine how Return on Asset was affected by bank deposits, Treasury bills, and liquid assets. The Central Bank of Nigeria's statistics bulletin was used as a secondary source of data. To determine the effect of the independent on the dependent variables, multiple regression analysis using the ordinary least squares method was used. A positive but negligible link was found between bank deposits and return on assets, a negative but negligible correlation was found between liquid assets and return on assets, and a positive but negligible correlation was found between treasury bills and return on assets. The research recommends taking the appropriate action to halt unfavorable market developments that can negatively impact bank deposits. Furthermore, it is recommended that banks choose competent staff to ensure optimal decisions on the appropriate degree of liquidity.

Hamal, Janga (2020) evaluated the effects on the profitability of Nepalese non-life insurance firms of the following factors: leverage ratio, size of the company, age of the company, and total debt. The return on asset (ROA), a metric for profitability, is the dependent variable in this study. The study's foundation is secondary data from nine non-life insurance firms that were examined between 2066–2067 and 2075–2076 during a ten-year span. The financial statements that the chosen non-life insurance businesses released each year served as the source of the data. The effects and importance of the chosen independent variables on ROA have been examined using regression models, correlation analysis, and descriptive statistics. As a result of increased liquidity, but not increased leverage, the study's findings indicate that Nepalese non-life insurance businesses become less profitable. Nevertheless, the analysis shows that the profitability of the industry is not significantly correlated with business size, firm age, or total debt. In order to increase profitability, the research advises non-life insurance businesses to concentrate on managing their capacity to pay liabilities properly. They should also aim to keep their leverage ratios lower in order to manage above-average losses.

Khatri (2020) has done a study on the effect of liquidity on Nepalese commercial banks' profitability. This essay aims to examine the connection between Nepal's commercial banks' profitability and liquidity. The study, which covered the years 2013 to 2019, involved ten of

the twenty-seven listed commercial banks. The secondary data used in this study were taken from the annual reports of the chosen commercial banks and the Bank Supervision Reports issued by Nepal Rastra Bank. Return on equity (ROE) and return on assets (ROA) are the stand-ins for profitability, while the credit-deposit ratio (CDR), cash-deposit ratio (CADR), and assets quality (AQ) are the measures of liquidity. Asset quality (AQ) has a negative and significant association with return on assets (ROA), but a positive and substantial link with return on equity (ROE), according to the results of the Hausman test and the fixed effects method. The return on equity (ROE) and return on assets (ROA) have a positive but negligible connection with the cash deposit ratio (CADR). Nonetheless, the research indicates that there is a negative and negligible correlation between credit-deposit (CDR) and return on equity (ROE), and a positive but small correlation between CDR and ROA.

Ajayi and Lawal (2021) investigated the impact of liquidity management on the profitability of banks. Financial managers are concerned about how they will be able to balance profitability and liquidity management, two critical factors for the expansion and survival of any firms, including financial institutions. Thus, utilizing secondary data from the published annual reports of five (5) selected Deposit Money Banks in Nigeria over a ten-year period (2009-2018), this research investigates the link between liquidity management and bank performance. Loan to deposit ratios, loan to assets ratios, and liquid ratios are the stand-ins for liquidity management, while return on assets served as the stand-in for profitability. The results of the study indicated that there is a positive and significant relationship between return on assets (ROA) and the loan to deposit ratio (p-value 0.0021), a positive and significant relationship between the loan to asset ratio (p-value 0.0005) and the ROA, and a positive and insignificant relationship between the liquid ratio (p-value 0.1808) and the ROA. The data was analyzed using Auto Regressive Distributed Lag (ARDL). The study's conclusions indicate that there is a strong and positive relationship between liquidity management and bank profitability in Nigeria. It is recommended that banks constantly strive to strictly abide by credit-granting laws in order to manage their credits successfully.

Patel and Patel (2021) analyzed the insurance sector is crucial to the Indian economy. A method for reducing risk and uncertainty is insurance. Practitioners, academics, and regular people have all expressed interest in the idea of insurance. Insurance items are unsought

goods that consumers often do not purchase unless and until they are made aware of them. The creation of the Insurance Regulatory and Development Authority (IRDA) Act in 1999 sent a strong message that the monopoly of some businesses in the insurance industry was coming to an end. This study attempts to use the CARMEL model to evaluate the performance of LIC and the other three private insurance companies from 2012–2013 to 2018–2019. The main activities of life insurers are covered by these factors. Usually, proper risk management, a strong internal control system, and effective and efficient business underwriting are added together to determine the overall financial soundness and performance. The conclusion is that the ratio of earnings to profitability is the most crucial performance metric. According to the ANOVA results, there is a significant difference between the CARMEL ratios of the four selected life insurance firms. The null hypothesis is thus accepted. The study's conclusion is that investors who want to purchase a life insurance policy can choose any one of the chosen businesses.

Salameh (2022) studied that a nation's financial climate is significantly influenced by the stability of its insurance corporations. Using a unique approach to analyze the financial soundness of insurance businesses, this study will further evaluate the link between the two parameters. The model may be used as a gauge for the financial situation of a nation, and this is done by analyzing the declines in insurance rates. To evaluate 12 indicators that were created from six CARMEL model parameters, discriminate regression was the approach employed on the Amman Stock Exchange (ASE). The six factors under test were capital sufficiency, asset quality, reinsurance and actuarial concerns, management effectiveness, profits and profitability, and liquidity. Ten out of twelve indicators are important variables, according to the findings. Additionally, the study demonstrated that the CARMEL model is a useful tool for evaluating the financial stability of ASE insurance businesses, with a very slim chance of spotting a discrepancy between performance as planned and reality. Eight out of the 19 enterprises had the effect of deviation, three of which were impacted by type II mistake (riskier deviation). The study came to the conclusion that the CARMEL model is an important model and that insurance companies who adhere to the JIF's regulations are financially stable.

Septina (2022) examined that how macroeconomic conditions and particular insurance business characteristics affected the financial performance of general insurance firms in Indonesia. Claims ratios, premium growth ratios, risk-based capital ratios, Gross Domestic Products (GDP), and inflation serve as proxies for the insurance company's specific variables. Return on assets and return on equity serve as proxies for financial performance. 35 general insurance businesses that were registered with the Financial Services Authority (OJK) between 2016 and 2019 comprise the study samples. To estimate the appropriate regression model of the Common Effect Model, Fixed Effect Model, or Random Effect Model, panel data regression analysis with a three-stage model estimation methodology using the Chow-test, Hausman-test, and Lagrange Multiplier-test is used in the research. The Random Effect Model is the most appropriate regression model analysis to be chosen. The findings indicate that while the risk-based capital ratio considerably influences return on assets but not return on equity, the claims ratio significantly affects both return on assets and return on equity. While GDP and inflation have little impact on return on assets and return on equity, the premium growth ratio does. Due to the wide range of operations, general insurance firms must be careful to control claim costs and preserve solvency levels, especially when investing in assets.

Table 1

Meta Table

Authors/ Year	Topic of the study	Objectives of the study	Methods of the study	Major Findings of the study
Davronov (2016)	liquidity management practices used by commercial banks in Uzbekistan	To discussion and classification of theoretical methods to the management of liquidity in commercial banks	ARIMA-based mathematical model	It should be highlighted that the model suggested in the article is not completely capable of optimizing bank activities and reducing risks associated with liquidity management. On the other hand, it has to do with the fact that the bank projects its future cash flows with a certain degree of certainty.

Khan & Ali (2016)	Impact of Profitability of Commercial Banks in Pakistan	Liquidity on Profitability of Commercial Banks in Pakistan	To examines the relationship between liquidity and profitability of commercial banks.	Correlation, Regression analysis have been used.	The outcome showed that there is a substantial positive correlation between bank profitability and liquidity. Analysis was done using secondary data that was taken from Habib Bank Limited's annual statements for the previous five years (2008–2014).
Wambui & Wanjim (2016)	credit risk affected the corporate liquidity of Kenya's deposit-taking microfinance institutions (DTMs)	liquidity of deposit-taking microfinance institutions	To analyze the Strength of the association between the variables	Regression analysis method have been used	Kenyan deposit-taking microfinance institutions' corporate liquidity is strongly impacted by credit risk, with this impact being statistically significant.
Coleman et al. (2017)	Patterns of internal liquidity management and their impact on bank lending	internal liquidity management and their impact on bank lending	To explain the patterns of internal liquidity management and their impact on bank lending	Regression analysis, Descriptive analysis	The findings imply that internal liquidity management becomes more sophisticated under financial strain. When there is a liquidity shock, privately held banks are the most affected, and they raise their internal financing levels to continue branch lending while their government-owned rivals take a more calculated approach.
Ojha (2018)	Impact of liquidity on profitability of Nepalese Commercial Bank	liquidity on profitability of Nepalese Commercial Bank	To examine the forms and patterns of liquidity	Descriptive and analytical methods have been used	The key findings stated that there is significant relation between numbers of variables that impacts on the liquidity performance of Nepalese commercial banks.
Shamas, Zainol, & Zainol (2018)	The Impact of Bank's Determinants on Liquidity Risk	Bank's Determinants on Liquidity Risk	To determine the relationship between certain factors and proxies for liquidity risk, such as cash to total assets, in Bahraini Islamic Banks (IBs), in order to more effectively manage and mitigate this important financial risk.	Mean, standard deviation, correlation and multiple regression analysis have been used	It was found that liquidity risk is positively related to return on average assets (ROA). On the other hand, non-performing loans (NPLs) and capital adequacy ratio (CAR) affect liquidity risk negatively and significantly. Lastly, bank size and the financial crisis show a negative

				and insignificant association with Liquidity Risk.
Jaishi and Poudel (2019)	Impact of firm specific factors on financial performance: A comparative study of life and Non-life insurance companies in Nepal	To examine the connection between non-financial entities' capital structure and company efficiency	Descriptive and Regression analysis have been used	The study found that leverage had a considerable detrimental effect on company efficiency and that the hospitality sector was heavily leveraged.
Bencharles, and Abubakar, (2020)	The Effects of Liquidity Management on the Profitability of Nigerian Conventional and Islamic Banks	To examine the effect of liquidity management on the profitability of Islamic and conventional banks in Nigeria	Descriptive statistics, the unit root test, and the co-integration test	This study found that compared to conventional banks, Islamic banks' profitability reacted more sharply to changes in the amount of liquidity. Although liquidity was shown to be more important in Islamic banks, the study found that the relationship between liquidity and profitability matched the risk return hypothesis.
Wuave, Yua, and Yua, (2020)	Effect of liquidity management on the financial performance of banks in Nigeria	To examines the effect of liquidity management on financial performance of banks in Nigeria	When selecting between a fixed effect and a random effect model, panel regression analysis is used to estimate the model and perform the Hausman test.	The study finds that liquidity ratio (LQR) have positive and significant effect on financial performance of DMB as measured by return on assets (ROA), return on equity (ROE) and net interest margin(NIM).
Obim, Takon, and Mgbado, (2020)	The effect of liquidity on Nigerian banks' profitability	To investigate how liquidity affects bank profitability	Ordinary least square multiple regression techniques	The data showed that the relationship between return on assets and bank deposits was positive but negligible, the relationship between return on assets and liquid assets was negative but insignificant, and the relationship between return on assets and treasury bills was positive but insignificant.

Hamal, Janga. (2020)	Factors Impacting Non-Life Insurance Companies' Profitability in Nepal	To investigate the effects on non-life insurance businesses' profitability in Nepal of the following factors: firm size, age, leverage ratio, liquidity ratio, and total debt	Descriptive statistics, correlation analysis and regression models have been employed	According to the study's findings, Nepalese non-life insurance businesses' profitability rises when liquidity rises but falls as debt rises. The analysis does, however, demonstrate that the profitability of the industry is not significantly correlated with company size, firm age, or total debt.
Khatri, (2020)	Impact of liquidity on profitability of Nepalese commercial banks	To analyze the relationship between the liquidity and the profitability of commercial banks in Nepal	Housman test, followed by the fixed effects method,	The findings demonstrated that, whereas assets quality (AQ) has a positive and significant link with return on equity (ROE), it has a negative and substantial association with return on assets (ROA). There is a positive but negligible correlation between return on equity (ROE) and return on assets (ROA) and the cash deposit ratio (CADR).
Ajayi, and Lawal, (2021)	Effect of Liquidity Management on Banks Profitability	To examines the relationship between liquidity management and bank performance	Auto Regressive Distributed Lag (ARDL)	The study's conclusions indicate that there is a strong and positive relationship between liquidity management and bank profitability in Nigeria. It is recommended that banks constantly strive to strictly abide by credit-granting laws in order to manage their credits successfully.
Patel and Patel (2021)	Performance of Selected Life Insurance Companies	To study the method for reducing risk and uncertainty is insurance	CARMEL model, Regression Analysis, ANOVA Test	There is a significant difference between the CARMEL ratios of the four selected life insurance firms. The null hypothesis is thus accepted. The study's conclusion is that investors who want to purchase a life insurance policy

					can choose any one of the chosen businesses.
Salamen (2022)	Evaluation of financial soundness of insurance firms on the Amman Stock Exchange. Insurance Markets and Companies	To discovered that a nation's financial climate is significantly influenced by the stability of its insurance corporations	Regression Analysis, Descriptive Analysis		The study demonstrated that the CARMEL model is a useful tool for evaluating the financial stability of ASE insurance businesses, with a very slim chance of spotting a discrepancy between performance as planned and reality. Eight out of the 19 enterprises had the effect of deviation, three of which were impacted by type II mistake (riskier deviation).
Septina (2022)	Determinant of financial performance for general insurance companies in Indonesia	To examine that how macroeconomic conditions and particular insurance business characteristics affected the financial performance of general insurance firms in Indonesia	Regression model, Common Effect Model, Fixed Effect Model, Chow-test, Hausman-test, and Langrage Multiplier-test is used		The findings indicate that while the risk-based capital ratio considerably influences return on assets but not return on equity, the claims ratio significantly affects both return on assets and return on equity. While GDP and inflation have little impact on return on assets and return on equity, the premium growth ratio does.

2.5 Research gap

It is clear from the studies examined that improved performance of business entities is significantly influenced by liquidity. The review emphasizes how different aspects of liquidity management affect profitability. The majority of research shows a strong correlation between profitability and liquidity. According to the literature mentioned above, liquidity and profitability are traded off in the financial industry, and both variables reinforce one another. Depending on the industry in which the research was done, different outcomes were also seen. While prior research has largely concentrated on the life insurance sector, this study showed the connection between liquidity and profitability in Nepal's life insurance sectors.

The prior research only examined a small number of variables and failed to identify the precise factors that determine profitability. The prior study was insufficient to determine the influence of profitability over maintaining liquidity. Due to the competing effects of profitability, it is now impossible to fully describe the impact on operational effectiveness and the unique issue that insurance is currently experiencing.

Financial and statistical instruments are the only ones used in the prior research. Only a descriptive research design was employed for these studies. Correlations, simple regression, and panel regression analysis were mostly employed in this study. This study has utilized many financial and statistical analyses. Among them are multiple regression analysis, correlation analysis, and ratio analysis. Descriptive and analytical research designs were utilized in this study.

CHAPTER III

RESEARCH METHODOLOGY

The technique to approach a research topic methodically is through research methodology. The study's validity and reliability, the data collecting process and time period, the apparatus, the sample description, the research goal and design, and the analytic plan. Without a process, it is conceivable that the results reached an issue can be solved systematically using research technique. It is the science of learning how to do research. Research methodology is the general term used to describe the processes researchers use to describe, explain, and forecast events. Therefore, this chapter clarifies the methods used in this case, which may be misconstrued. Research methodology outlines the approach and procedure used in all areas of research and aids in the solution of logical issues. Research methodology establishes the general strategy linked with a research and is used to gather information and data.

3.1 Research design

The study has an analytical and descriptive research design. Finding out who, what, where, or how the study was conducted is the focus of descriptive research design. It defines a population in light of significant factors. Finding correlations between variables is one of the many uses for descriptive research designs. The study uses a descriptive research approach to demonstrate how profitability and liquidity are related. Because descriptive research includes many forms of surveys and fact-finding inquiries, it is used to ascertain financial status. Impact measurement study design includes analytical research. The study used an causal comparative model to examine the findings by figuring out how the profitability of Nepalese life insurance businesses is impacted by liquidity. Causal comparative research designs employ facts or information that is previously known and analyze it to generate an opinion on the topic.

3.2 Population and sample

Population refers to any component, person, or unit that satisfies the requirements require a group to be investigated that is stable and has a representative sample. A sample is obtained for through analysis. The 14 life insurance firms that are registered with the insurance board on date June 2023 made up the study's sample. The purposive sampling approach is used in this investigation. In this study, a total of five life insurance firms are chosen for the ten-year

financial period 2013/14–2022/23. The following is a list of examples of life insurance companies:

S.N	Name of Companies	Operating From	Sample Selection
1	Rastriya Beema Sasthan	2025 B.S(1969 A.D)	
2	National Life Insurance Company Limited	2044 B.S(1988 A.D)	Sample
3	Nepal Life Insurance Company Limited	2058 B.S(2001 A.D)	Sample
4	Life Insurance Corporation (Nepal) Limited	2057 B.S(2000 A.D)	Sample
5	Metlife(ALICO)	2058 B.S (2001 A.D)	Sample
6	Suryajyoti Life Insurance Company Limited	2079 B.S (2023 A.D)	
7	Himalaya Life Insurance Limited	2080 B.S (2023 A.D)	
8	Asian Life Insurance Company Limited	2064 B.S(2008 A.D)	Sample
9	IME Life Insurance Company Limited	2074 B.S(2017 A.D)	
10	Reliable Nepal Life Insurance Company	2074 B.S(2017 A.D)	
11	Sanima Reliance Life Insurance Limited	2079 B.S(2023 A.D)	
12	Citizen Life Insurance Limited	2074 B.S (2017 A.D)	
13	Sun Nepal Life Insurance Company Limited	2074 B.S(3.28 A.D)	
14	Parbhu Mahalaxmi Life Insurance Limited	2080 B.S (2023 A.D)	

Source: Websites of Insurance Board of Nepal

3.3 Nature and sources of data

The article will draw from secondary sources and published literature. Data are gathered from the Insurance Board and insurance companies annual reports. The websites of insurance companies' annual reports, which include an income statement and statement of financial condition, are the source of data for all five financial periods. The Insurance Board's website was used to determine the total number of active life insurance businesses. For a literature review, the Insurance Act, Regulation, Directives, Guidelines, and Circulars are also studied. The official websites of the Insurance Board and the corporations provided the majority of the material.

- Library research study
- Internet, home pages and related links visit
- Nepal stock exchange (NEPSE)
- Quarterly and annual reports of sample insurance companies

- The other sources will be articles, previous study on related topic, published articles of different author and journal.

3.4 Methods of analysis

To achieve the goal of the research, the material was organized according to the requirements of the research task. Following methods and techniques from statistics and finance were used to examine the data in this study.

a. Financial Analysis

1. Ratio Analysis

b. Statistical Analysis

1. Mean

2. Standard Deviation

3. Co-efficient of variation

4. Regression Analysis

Arithmetic mean

A single number from the data range that is used to symbolize each value in the sequence and is referred to as the mean or average value. Since an average falls some place in the data's range. It is also known as a central value measure. It is determined by,

$$\text{Mean } (\bar{x}) = \frac{\sum x}{N}$$

Where,

\bar{x} = Arithmetic mean

$\sum x$ = Sum of value of all items

N = Number of items

Standard deviation

The statistic that is most frequently used to describe data distribution variability is the standard deviation. It may be viewed as a rough indicator of the average deviation of an observation from the mean on each side. Determining the degree of representativeness of the mean is greatly aided

by the standard deviation, denoted by Greek characters and commonly read as sigma. The following formula is used to calculate standard deviation:

$$\text{Standard deviation } \sigma = \sqrt{\sum_{i=1}^N (x - \bar{x})^2}$$

Where,

σ = standard deviation

$\sum(x-\bar{x})^2$ = Total square of arithmetic average deviation

N = Number of items

Coefficient of variation

The ratio of a sample's standard deviation to its mean is known as the coefficient of variation. The relative variability of the data distribution is mostly assessed using the coefficient of variation. Additionally, it may be used to calculate relative risk.

$$CV = \frac{\sigma}{\bar{X}} \times 100$$

Where,

CV = co-efficient of variation

σ = Standard deviation

X = Arithmetic mean

Correlation analysis

The relationship or correlation between one or more independent and dependent variables is referred to as a correlation. The two variables are said to have a correlation if their values are so closely associated that changing The dependent variable's value is also affected by the value of one independent variable. For instance, a rise in monthly income causes a rise in monthly expenses. Therefore, it may be claimed that there is a positive correlation between the two variables, income (independent) and spending (dependent).

Consequently, correlation is a statistical technique that may be used to assess whether or not two or more variables are connected, as well as the degree (extent) and direction of correlation in the event that they are. The correlation coefficient (r) might lie anywhere between -1 and +1. When r

is positive, two variables are moving in the same direction, and when r is negative, they are moving in the opposite way. Correlation analysis between the dependent and independent variables was carried out in this study. The formula below is used to get the correlation coefficient between these variables.

$$\text{Correlation co-efficient (r)} = \frac{\sum XY - n\bar{X}\bar{Y}}{\sqrt{\sum X^2 - n\bar{X}^2} \sqrt{\sum Y^2 - n\bar{Y}^2}}$$

Where,

- n = number of observations in the x and y series
- $\sum x$ = Total observational data in series x
- $\sum Y$ = Total observational data in series y
- $\sum x^2$ = Total squared observation for the series x
- $\sum y^2$ = Total squared observation for the series y

The correlation coefficient probable error is a metric for evaluating the validity of an observed correlation coefficient value. As it depends on the assumption of random sampling, it is computed to determine how reliable the correlation coefficient is.

$$\text{As, P.E(r)} = \frac{\sqrt{(1-r)^2}}{N}$$

Where,

$$r = \text{Standard error, } n = 0.6745$$

The number 0.6745 was chosen because, given a normal distribution, 50% of the observations fall within the range of 0.6745, where the population's mean (μ) and standard deviation (σ) are represented, respectively. To ascertain if a sample correlation coefficient value found can be indicative of any population-level correlation, one uses $E@$. If $r < \text{P.E.}$, correlation is not significant at all; nevertheless, if $r > \text{P.E.}$, correlation is significant.

Multiple regression analysis

Regression analysis is a statistical method for determining the connection between variables in statistical modeling. It features a variety of modeling and analysis approaches for multiple

variables and one or more independent variables. A mathematical method for determining the average association between two or more variables in terms of the initial unit of data is regression analysis. Multiple regressions are typically used to better understand the relationship between a number of independent or predictor factors and a dependent criteria variable. Return on assets and return on equity are the dependent variables in this study, while the independent factors are the current ratio, debt ratio, gross profit margin ratio, and net profit margin ratio.

The regression line is $Y = a + bx$

Model of Multiple Regressions

$$\hat{Y}_{ROA} = \alpha + \beta_1 CR + \beta_2 QR + \beta_3 CsR + \epsilon \dots \dots \dots (i)$$

$$\hat{Y}_{ROE} = \alpha + \beta_1 CR + \beta_2 QR + \beta_3 CsR + \epsilon \dots \dots \dots (ii)$$

Where, \hat{Y} = regression line (ROA/ROE)

α	= Constant
$\beta_1, \beta_2, \beta_3$	= Coefficient
CR	= Current Ratio
QR	= Quick Ratio
CsR	= Cash Ratio
ϵ	= Estimation of error term

The dependent variables on the y-axis and the independent variables on the x-axis have a linear relationship, as shown by a regression line. Through analysis of the data pattern that the variables create, the correlation is established. By changing the value of x in the regression equation, this statistical tool allows one to examine how a change in the independent variable, x, affects the behavior of the dependent variable, y. The regression line is shown closest to the data points in a regression graph. A linear relationship between two sets of variables is shown by the regression line. Any Plotted closest to the data points (x, y) on a regression graph is the Least Squares Regression Line (LSRL). In order to assess a project's viability, regression is frequently employed in financial models such as the CAPM and investing metrics such as beta. Projections of investments and financial returns are also made with it.

3.5 Conceptual framework and definition of variables

The study's research framework outlines the methodical justifications for the relationships between the between both dependent and independent variables in an effort to clarify the relationship between the profitability and liquidity traits of Nepalese life insurance companies. The research framework for the study is included in this part, along with information on the factors that were examined. The return on equity and return on assets are the dependent variables in this research. On the other hand, the cash, quick, and current ratios are the independent variables. To describe the key goals and dimensions of this study, the conceptual model presented below is structured.

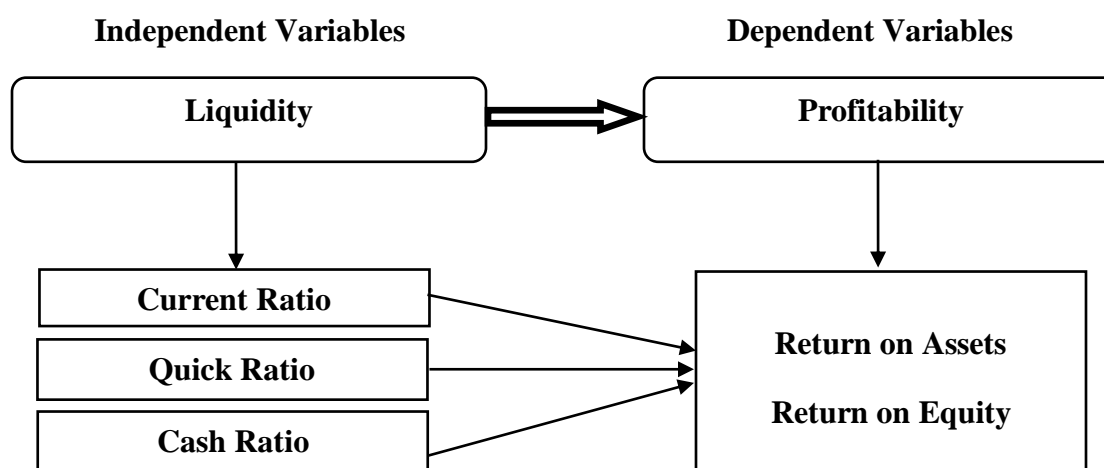


Figure 1: Conceptual framework

Definition of variables

Return on assets

Return on assets demonstrates how well businesses convert the funds used to buy assets into net income. As a result, the higher return on assets demonstrates the businesses' increased profitability. It provides a vital indication of the company's overall productivity and displays the profit margin as a proportion of the company's total resources. Financial analysts and managers utilize return on assets as a metric to assess how well a business is allocating its resources to generate revenue. This is how ROA at a hypothetical widget manufacturing may operate, if that seems abstract. The business has many production facilities as well as the equipment and tools needed to produce widgets. Along with unsold widget inventory, it also keeps a store of raw materials. Then there are its unique widget designs, and the cash and cash equivalents it keeps on hand for business expenses.

The following factors determine it.

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \times 100\%$$

Return on equity

Return on assets is a clear indicator of a company's ability to make a return on its owners' investments. This ratio is taken into account from the standpoint of the investor. The management team is more effective at maximizing equity when the ROE is greater. ROE offers a straightforward tool for assessing the returns on investments. A company's competitive advantage may be identified by comparing its return on equity (ROE) to the industry average. Additionally, return on equity (ROE) might shed light on how management of the company is utilizing equity capital to expand the company.

The following factors determine it.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders Equity}} \times 100\%$$

Current ratio

Divide current assets by current liabilities to get the current ratio. This demonstrates the firm's financial stability and solvency. It is a fundamental metric for assessing the firm's solvency and liquidity status. It is also known as the working capital ratio or the current ratio. In order to determine if a business can sustainably balance its assets, financing, and liabilities, this ratio evaluates the current assets of the firm relative to the current liabilities. A company's capacity to pay off short-term obligations is demonstrated by the current ratio, which is typically considered as a broad indicator of financial health. Considered assets and liabilities in the current ratio sometimes have a time period. One year is often the due date for obligations included in this percentage, for instance contrarily, resources that the business will deplete or liquefy (turn into cash) within a year are considered current assets in this calculation.

The current ration determine by following formula.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The greater ratio shows the firm is in a strong financial position and able to cover its expenses. The present ratio of 2:1 is typically seen as adequate. A higher ratio denotes a higher level of working capital, and a lower ratio the opposite.

Quick ratio

The fast ratio provides a connection between current obligations and quick or liquid assets. If an asset can be quickly or instantly turned into cash without losing value, it is said to be liquid. The most liquid asset is cash. Book debts and marketable securities are two more assets that fall under the category of fast assets and are seen to be reasonably liquid.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Cash ratio

A measure of a company's liquidity is the cash ratio. It determines the proportion between a company's current obligations and overall cash and cash equivalents. This measure assesses if a business can pay off its short-term debt with cash or near-cash assets like easily tradable securities. Creditors can use this information to determine how much, if any, money they are prepared to loan to a firm. The cash ratio is calculated as cash & cash equivalents divided by companies' current liabilities for the short term pay off debt through companies' liquidity.

$$\text{Cash Ratio} = \frac{\text{Cash \& Cash Equivalents}}{\text{Current Liabilities}}$$

The line item on the balance sheet labeled "cash and cash equivalents" shows the value of an organization's assets that are either cash or can be quickly converted into cash. Bank accounts and some marketable instruments, such as short-term government bonds and commercial paper, are examples of cash equivalents.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter contains the data analysis of the information acquired on the relationship between the liquidity and profitability of life insurance businesses in Nepal. Data are routinely captured and arranged for analysis utilizing a variety of tools and processes. Therefore, this chapter serves as the study's major body and is focused with the presentation, analysis, and interpretation of the data gathered.

4.1 Presentation of data

Examining how liquidity affects the profitability of Nepalese life insurance companies requires compiling pertinent data and statistics, which are obtained through audited financial statements and annual reports. The study's most important and pertinent variables are the cash, quick, current, and equity ratios as well as the return on assets and other important variables. To achieve the goals of the study, data presentation and collection are not enough. Accordingly, a range of financial and statistical techniques have been used to examine the relationship between liquidity and profitability of Nepalese life insurance companies.

4.2 Liquidity position

The liquidity position of the company is critical to its functioning and is regarded as the essential component needed to maintain a company's everyday operations. A company's good financial health is indicated by a high ratio of liquidity. In order to determine a company's capacity to fulfill its short-term obligations, a study of the liquidity situation of life insurance firms is conducted. The liquidity situation shows how many times the current assets can cover the current obligations at once.

4.2.1 Current Ratio

Similar functionality is provided by current ratio, which is commonly employed. Its other name is liquidity ratio. It is regarded as a measure of a company's financial stability. It shows that the business can fulfill its present responsibilities. However, a changing current ratio might be deceptive. The current ratio changes even while net working capital remains unchanged if a business issues commercial paper to raise money and uses that money to buy marketable assets. A 2:1 current ratio is typically seen as appropriate for insurance

companies. It serves as a general guideline for calculating liquidity. The ratios of the chosen firms during the research period are computed below.

Table 1

Current Ratio (CR)

FY	NALIC	NELIC	LICL	MetLife	ALICL
2013/14	46.31	20.41	12.44	39.11	46.31
2014/15	35.17	27.83	14.81	50.88	35.17
2015/16	30.63	32.41	18.95	46.61	11.20
2016/17	14.67	25.85	5.06	63.34	14.67
2017/18	7.90	1.18	1.07	70.74	12.04
2018/19	5.10	11.62	1.06	58.47	12.98
2019/20	1.10	1.10	1.05	52.90	1.10
2020/21	1.09	1.10	1.05	52.15	20.45
2021/22	1.08	1.05	1.13	20.46	25.95
2022/23	1.13	1.28	1.05	1.14	1.05
Average	14.42	12.38	5.77	45.58	18.09
S.D	16.829	12.987	6.9393	20.784	14.361
C.V	116.72	104.89	120.34	45.60	79.38

Sources: Annual report of insurance companies

The Table 1 presents the current ratio positions for five life insurance firms during a 10-year period. Additional computations include the mean, standard deviation, and coefficient of variation. The average current ratio for NALIC, NELIC, LICL, MetLife and ALICL is greater than the average current ratio norm at 14.42, 12.38, 5.77, 45.58, and 18.09 correspondingly. For the study period, the average current ratio is highest for MetLife but lowest for LICL. This demonstrates that throughout a ten-year period, life insurance firms maintained their greatest level of current ratio. METlife has a greater standard deviation than other variables at 20.784, which shows that METlife is more risky than others companies. The current ratios of NALIC, NELIC, LICL, MetLife and ALICL have respective CVs of 116.72, 104.89, 120.34, 46.60, and 79.38. LICL has a higher CV than the other firms at 120.34 which show the higher the coefficient of variation, the greater the level of dispersion around the mean.

4.2.2 Quick Ratio

The net term liquidity situation is measured by the quick ratio. Due to the inclusion of less liquid assets, the current ratio, which assesses short-term solvency in gross terms, is unable to reflect the real liquidity situation. When compared to current assets, The availability of highly liquid assets that can be swiftly converted into cash is indicated by the quick ratio. When the quick ratio is 1:1, it is regarded as ideal. The results are shown in table 2 for the current ratio mean value and coefficient of variation.

Table 2

Quick Ratio (QR)

FY	NALIC	NELIC	LICL	MetLife	ALICL
2013/14	43.69	20.37	12.40	38.79	46.28
2014/15	35.15	27.81	14.79	50.78	35.15
2015/16	30.62	32.40	18.94	46.55	11.19
2016/17	14.66	25.84	5.05	63.29	14.66
2017/18	7.85	1.18	1.06	70.72	12.03
2018/19	5.05	11.62	1.05	58.45	12.97
2019/20	1.07	1.09	1.04	52.89	1.09
2020/21	1.05	1.08	1.03	52.14	20.42
2021/22	1.07	1.00	1.12	20.45	25.93
2022/23	1.18	1.21	0.05	1.14	0.52
Average	14.16	11.76	5.66	45.53	18.03
S.D	16.2817	12.3376	7.0105	20.785	14.4227
C.V	115.00	104.8	123.9	45.6	79.9

Sources: Annual report of insurance companies

The Table 2 depicts the positions of the Quick ratio for the five life insurance firms during a ten-year period along with the computation of the mean, standard deviation, and coefficient of variation. The average quick ratio of NALIC, NELIC, LICL, MetLife and ALICL is greater than the quick ratio norm at 14.16, 11.76, 5.66, 45.53, and 18.03 respectively. For the research period the average Quick ratio is highest for MetLife but lowest for LICL. This demonstrates that the LICL quick ratio is the best. This research demonstrates that throughout a ten-year period life insurance firms kept their Quick ratio at a high level.

METlife has a greater standard deviation than other variables at 20.785. The CV of quick ratio for the following businesses is as follows: NALIC, NELIC, LICL, MetLife and ALICL are at 115, 104.8, 123.9, 45.6 and 79.9 respectively. The CV of quick ratio for LICL is the highest of all life insurance firms at 123.9. However, the CV of MetLife is the lowest at 45.6. This indicates that the LICL QR trend is more erratic than others. This study demonstrates how the liquidity in various life insurance firms differs significantly.

4.2.3 Cash Ratio

A measure of a company's liquidity is the cash ratio. It determines the proportion between a company's current obligations and overall cash and cash equivalents. This measure assesses if a business can pay off its short-term debt with cash or near-cash assets like easily tradable securities. Creditors can use this information to determine how much, if any, money they are prepared to loan to a firm. The cash ratio is calculated as cash & cash equivalents divided by companies' current liabilities for the short term pay off debt through companies' liquidity.

Table 3

Cash Ratio (CR)

FY	NALIC	NELIC	LICL	MetLife	ALICL
2013/14	0.95	0.40	0.39	0.17	0.49
2014/15	1.11	0.90	0.49	0.40	0.75
2015/16	0.40	0.23	0.46	0.38	0.58
2016/17	0.86	0.46	0.30	0.77	2.06
2017/18	1.18	0.05	0.03	0.04	1.23
2018/19	0.66	3.29	0.04	0.42	1.52
2019/20	0.03	0.13	0.04	0.38	0.02
2020/21	0.02	0.14	0.04	0.58	0.14
2021/22	0.02	0.09	0.02	0.63	0.17
2022/23	0.03	0.03	0.02	0.02	0.01
Average	0.52	0.57	0.18	0.38	0.70
S.D	0.4831	0.9913	0.2021	0.2466	0.6984
C.V	92.10	172.6	110.40	65.22	100.14

Sources: Annual report of insurance companies

The Table 3 represents the Cash ratio position over a period of ten years for five life insurance firms. Mean, standard deviation, and coefficient of variation have also been computed. LICL and METlife have lowest mean value at 0.18, 0.38 respectively than standard of cash ratio. This shows that these two companies have lowest cash and cash equivalent or liquidity for the pay off short term debt. NALIC has a higher standard deviation and coefficient of variance than other insurance providers, at 0.9913 and 172.6 respectively. CV of NALIC has greater than others insurance companies at 172.6.

4.3 Profitability position

The operating performance of the businesses is gauged using the profitability ratio. In general, assessing a company's profitability may be used to determine how well it is performing. It serves as the efficiency gauge. The profitability situation of the life insurance industry has been impacted by liquidity. The high profitability position satisfies the objectives of wealth and profit maximization, which spur investors to make investments. A company's capacity to make money from its assets is shown by its profitability.

According to Owolabi & Obida (2012), Profitability is the ability of a business to turn a profit on all of its commercial activities. Increasing and improving income is any company's main objective, thus using resources efficiently is essential. Profitability is a performance metric used to illustrate how well a financial institution is able to generate income above the cost of its capital base. The profitability measures the company's financial performance.

Strong and prosperous banks are better equipped to absorb setbacks and actively support the stability of the financial system. Profitability also demonstrates how well banks are doing in a certain environment. More precisely, it is an indication of how well a company's management is performing, the actions of its shareholders, and the capacity of the bank to handle risk (Aburime, 2008).

In terms of net premiums collected, ROI, ROE, and earnings from underwriting operations, insurance business financial performance is evaluated (Chen & Wond, 2004).

4.3.1 Return on assets

Based on the company's produced earnings divided by its total assets, this ratio calculates the operating efficiency of the business. It demonstrates effective management's use of resources to produce profits. The firm's return on total assets, or ROA, which is also known as a measure of management's overall success in turning a profit using its available assets. The better a company is doing, and the more lucrative it is, the greater its return on assets.

Table 4

Return on Assets (ROA)

FY	NALIC	NELIC	LICL	MetLife	ALICL
2013/14	2.13	3.00	1.13	1.00	2.00
2014/15	1.86	2.00	1.10	1.00	2.00
2015/16	2.05	2.00	1.10	3.00	2.00
2016/17	1.97	2.00	0.36	3.00	2.00
2017/18	1.86	2.00	2.99	3.00	2.00
2018/19	1.09	2.00	0.50	3.00	1.00
2019/20	1.72	1.00	0.98	3.00	2.00
2020/21	1.23	2.00	0.85	1.00	1.00
2021/22	1.14	1.00	0.65	2.00	1.00
2022/23	1.43	0.01	0.66	0.026	0.01
Average	1.65	0.02	0.01	0.02	0.02
S.D	0.3919	0.0066	0.0074	0.0093	0.0046
C.V	23.78	36.15	71.54	41.37	28.77

Sources: Annual report of insurance companies

The Table 4 present the position of return on assets for five life insurance companies during the 10 year period and computations are also made for the mean, standard deviation, and coefficient of variation. The mean value of NALIC has a greater than comparable life insurance firms at 1.65 and the lower is LICL is at 0.01. The standard deviation of NALIC is higher than others comparable companies which shows that the company bearing a high risk for the higher return. The coefficient of variation of LICL is higher than comparable life insurance company. This shows the higher the coefficient of variation the greater the level of dispersion around the mean.

4.3.2 Return on equity

Return on equity, which represents much profit a firm makes using the money shareholders have invested, gauges a corporation's profitability. The ROE metric measures how well a firm uses its equity to produce profits. High return on equity companies often have greater internal cash generation capabilities and are less reliant on loan funding. The results for the mean value and coefficient of variation of the return on equity ratio are shown in Table 5.

Table 5

Return on Equity (ROE)

FY	NALIC	NELIC	LICL	MetLife	ALICL
2013/14	2.27	3.00	1.18	0.94	1.00
2014/15	1.97	2.00	1.16.	0.65	1.00
2015/16	2.17	3.00	1.15	2.84	3.00
2016/17	2.10	2.00	0.38	3.23	3.00
2017/18	18.09	15.00	44.64	3.32	3.00
2018/19	8.75	14.00	8.61	3.00	3.00
2019/20	15.60	12.00	19.85	3.34	3.00
2020/21	12.14	18.00	16.88	1.64	2.00
2021/22	11.66	17.00	12.94	2.58	3.00
2022/23	18.66	17.00	12.61	0.20	0.20
Average	9.34	10.00	12.00	3.99	4.00
S.D	6.8662	0.0691	0.1355	0.0570	0.0569
C.V	73.50	67.03	113.44	136.72	136.00

Sources: Annual report of insurance companies

The Table 5 presents the position of return on equity for five life insurance businesses over a period of ten years. Additional computations include the mean, standard deviation, and coefficient of variation. The LICL average value is higher than others comparable life insurance company and MetLife has a lower at 12.00 and 3.99 respectively. This suggests that the company is better equipped to generate cash on its own. The higher standard deviation of NALIC is at 6.8662 and the lower standard deviation of ALICL is at 0.0569, which indicates that higher standard deviation show more risk than lower standard deviation. The coefficient of variation of LICL is higher than comparable life insurance companies

which indicates that higher the coefficient of variation the greater the level of dispersion around the mean.

4.4 Descriptive statistics

The mean, standard deviation, coefficient of variation, minimum and maximum values related to the variables under examination makes up the descriptive statistics employed in this study. The Table below lists the descriptive data from 2013–14 to 2022–23 for the five representative Nepalese life insurance firms taken into consideration in this study.

Table 6

Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Coefficient of Variation
ROA	50	0.0036	2.13	0.34	0.6801	198.33
ROE	50	0.0038	18.66	1.93	4.7626	246.83
CR	50	1.0464	70.74	19.25	20.0582	104.21
QR	50	0.0503	70.72	19.03	19.9710	104.96
CR	50	0.0120	3.29	0.47	0.6029	127.88

Sources: SPSS output result

The Table 6 represents the descriptive statistics of the study, as per the data, the current ratio, quick ratio, and cash ratio, which is used to measure liquidity, is averaged 19.25, 19.03, and 0.47 accordingly for the research period. Additionally, ROA and ROE have respective mean values of 0.34 and 1.93 for profitability metrics. It is discovered that the mean value of liquidity measures is greater than that of profitability metrics ROA and ROE. The Current ratio and quick ratio's average values are greater than expected, which shows that strong liquidity is not helpful for businesses since it discourages investment. The coefficients of variation for ROA, ROE, CR, QR and CR are 198.33, 246.83, 104.21, 104.96 and 127.88 respectively. The substantial volatility of the profitability and liquidity indicators utilized in the study is therefore revealed by the coefficient of variation.

4.4.1 Correlation coefficient

Using Pearson's correlation, the relationship between the current ratio, quick ratio, cash ratio, return on equity, and return on assets in Nepalese life insurance enterprises is investigated. The degree and Correlation measures the direction of an inverse relationship between dependent and independent variables. The study has employed correlation analysis to demonstrate the relationship between Return on equity (ROE) and Return on assets (ROA) are the dependent variables, while the independent variables are the current ratio (CR), quick ratio (QR), and cash ratio (LV).

Table 7

Correlations Coefficient		ROA	ROE	CR	QR	CSR
ROA	Pearson	1				
	Correlation					
	Sig. (2-tailed)					
	N	50				
ROE	Pearson	.687**	1			
	Correlation					
	Sig. (2-tailed)	0.000				
	N	50	50			
CR	Pearson	-0.047	-.280*	1		
	Correlation					
	Sig. (2-tailed)	0.747	0.049			
	N	50	50	50		
QR	Pearson	-0.050	-0.278	1.000**	1	
	Correlation					
	Sig. (2-tailed)	0.730	0.051	0.000		
	N	50	50	50	50	
CSR	Pearson	0.093	-0.064	0.156	0.153	1
	Correlation					
	Sig. (2-tailed)	0.519	0.658	0.280	0.289	
	N	50	50	50	50	50

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

* . Correlation is significant at the 0.05 level (2-tailed).

The Table 7 depicts the correlation coefficient between the dependent and independent variables. According to the correlation table, the cash ratio and return on assets have a positive connection which shows that a rise in the liquidity ratio will result in an increase in the return on assets. The association between current ratio, quick ratio and return on assets is

also negative and 1 substantial indicating that as liquidity increases, return on assets decreases. The liquidity ratios are insignificantly correlated with return on assets.

The correlation table shows that there is a negative association between the current ratio, quick ratio, cash ratio and return on equity, however it is insignificant at 0.05 levels. The liquidity ratios are negative correlated with return on equity, which indicating that a higher liquidity ratio decreases return on equity and it is insignificant at 0.05 levels. Return on equity is only marginally impacted by changes in liquidity.

4.4.2 Multiple regression analysis

The association between liquidity and profitability of life insurance businesses in Nepal was investigated using multiple regression analysis. The purpose of regression analysis is to determine how independent variables, or predictors, affect the dependent variables. Through the use of regression, one may determine which independent variable or variables together make up the linear equation whose coefficients best predict the value of the dependent variable. The coefficient of determination provides an explanation of how much variation in the dependent variable (profitability as measured by ROA and ROE) can be attributed to changes in the independent variables, or how much of the variation in the dependent variable can be explained by changes in the independent variables (current ratio, quick ratio, cash ratio).

A) Regression model I

Table 8

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157 ^a	.025	-.039	.69320

Sources: SPSS output result

a. Predictors: (Constant), CR, QR, CsR

The Table 8 presents the model summary; the coefficient of determination (R square value) explains the amount of change in the dependent variable (ROA) that can be accounted for by the current ratio, quick ratio, and cash ratio as three independent factors as well as the extent to which changes in the dependent variable can be explained by changes in the independent variables. The value of R-square indicates that life insurance companies in Nepal only received 2.5 percent of their assets back can be accounted for by the independent variables

(liquidity factors) that were investigated. However, this study is unable to explain the remaining 97.5%.

Table 9

ANOVA Test

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.561	3	.187	.389	.761 ^b
	Residual	22.104	46	.481		
	Total	22.665	49			

Sources: SPSS output result

a. Dependent Variable: ROA

b. Predictors: (Constant), LR, QR, CR

The Table 9 presents the ANOVA test which is a good predictor of the link between the dependent and independent variables, according to the outcome of significant value 0.000. The ANOVA test reveals a significance value of 0.761, greater than the alpha value of 0.05, indicating that the model is statistically insignificant in predicting how current ratio, quick ratio and cash ratio affect the profitability of life insurance companies in Nepal.

Table 10

Coefficient

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.316	.152		2.083	.043
	CR	.144	.193	4.241	.747	.459
	QR	-.147	.193	-4.303	-.758	.452
	CsR	-.102	.167	-.090	-.608	.546

Sources: SPSS output result

a. Dependent Variable: ROA

The Table 10 represents the coefficient of intercept 0β has a value of 0.316 and is insignificant at a 95% level of confidence. Return on assets for insurance businesses in Nepal was 0.316 according to the regression model, which held parameters (current ratio, quick ratio, and cash ratio) constant at zero. As a result, the return on assets will increase by 0.144 for every unit rise in the current ratio, decrease by -0.147 for every unit rise in the quick ratio and decrease by -0.102 for every unit increase in the cash ratio. The outcome shows that,

when return on assets is taken into account the beta coefficients for quick and cash are negative. The liquidity ratios are statistically insignificant with profitability ratio return on assets.

The regression equation is,

$$\text{ROA} = 0.316 + 0.144 \text{ CR} - 0.147 \text{ QR} - 0.102 \text{ CsR}$$

B) Regression model II

Table 11

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291 ^a	.085	.025	4.70237

Sources: SPSS output result

a. Predictors: (Constant), CR, QR, CsR

The model summary, shown in Table 11, shows that the percentage of variation in the dependent variable (ROE) that can be explained by three independent variables (current ratio, quick ratio, and cash ratio) or the coefficient of determination (R squared value) explains how much changes in the dependent variable can be explained by changes in the independent variables. The value of R-square indicates that only 8.5% of the return on equity of life insurance businesses in Nepal can be explained by the independent variables (liquidity determinants) that were examined. Nevertheless this study provides no explanation for the remaining 91.5%. The standard error of estimate of 4.70237, which demonstrates the greater variability of the observation, is also shown in the model summary.

Table 12

ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.245	3	31.415	1.421	.249 ^b
	Residual	1017.167	46	22.112		
	Total	1111.411	49			

a. Dependent Variable: ROE

b. Predictors: (Constant), CR, QR, CsR

Given that Table 12 presents the significant value of 0.000, it can be concluded that the model accurately predicts the connection between the independent and dependent variables.

The model's ability to forecast how the current ratio, quick ratio, and cash ratio affect the profitability of life insurance businesses in Nepal is statistically insignificant, as indicated by the ANOVA test, which yields a significance value of 0.249 that is bigger than the alpha value of 0.05.

Table 13

Coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.339	1.028		3.247	.002
	CR	-.776	1.306	-3.269	-.594	.555
	QR	.713	1.311	2.992	.544	.589
	CsR	-.095	1.136	-.012	-.084	.933

Sources: SPSS output result

a. Dependent Variable: ROE

The Table 13 depicts the coefficient of intercept 0 has a value of (3.339) and is insignificant at a 95% confidence level. According to the regression model, the return on equity of insurance businesses in Nepal was 3.339 when the Quick Ratio and Cash Ratio were held constant at zero. According to the results, a unit rise in the quick ratio will result in an increase in return on equity of 0.713 and insignificant at 95% confidence level. A unit rise in the current ratio will result in an increase in return on equity of -0.728, whereas a unit increase in the cash ratio would result in an increase in return on equity of -.095 The result shows that, in relation to return on equity, the quick ratio's beta coefficient is significant and positive. This demonstrates that quick ratio affects return on equity in a favorable way. Similar to ROE, the liquidity ratio's beta coefficient is also positive and insignificant. The beta coefficient for the liquidity ratio is also both positive and negative, and it is negligible, much like the return on equity. It suggests that the impact of liquidity on return on equity is somewhat favorable.

The regression equation is,

$$\text{ROE} = 3.339 - 0.776 \text{ CR} + 0.713 \text{ QR} - 0.95 \text{ CsR}$$

4.5 Discussion

In this study, secondary data were used. Given the results of the study described in the preceding section, the relationship between liquidity and profitability is examined. The important findings of the study are described in following paragraph.

MetLife's average current ratio is 45.58, greater than the sample life insurance company's average of 5.77 and lower than LICL's. MetLife has therefore continued to keep greater liquidity. Compared to sample insurance firms, LICL has a larger coefficient of variance (123.9), whereas MetLife has a lower coefficient of variation (45.6). This indicates that the LICL current ratio is extremely variable. Among the sample insurance firms, MetLife has a higher average fast ratio of 45.53, while LICL has a lower average of 5.66. MetLife has therefore continued to keep greater liquidity. MetLife has a smaller coefficient of variance of 45.6 than LICL, which has a coefficient of variation of 123.9.

ALICL has an average cash ratio of 0.70, which is greater than the sample insurance firms' average of 0.18 for LICL. Compared to sample insurance companies, NELIC has a larger coefficient of variance (172.6), whereas MetLife has a lower coefficient of variation (65.22). Of the sample insurance businesses, NALIC has a higher average return on assets (1.65), whereas LICL has a lower average (0.01). This indicates that NALIC's management uses assets to create earnings efficiently. Among the sample insurance firms, LICL has a greater coefficient of variance (71.54), whereas NALIC has a lower coefficient of variation (23.78). This indicates that LICL's return on assets is very variable. This suggests that LICL is a riskier firm. With an average return on equity of 0.12, LICL outperforms the sample insurance businesses, while MetLife's average is lower at 0.399, suggesting that the former is better equipped to generate cash internally. METlife has a greater coefficient of variation—136.72—than the sample insurance firms, whereas NELIC has a lower coefficient of variation—67.03. This indicates that METlife's return on equity varies greatly. This suggests that METlife is a riskier firm.

As per the descriptive study, the average current ratio and quick ratio for Nepalese life insurance firms are 19.25 times and 19.03 times, respectively. During the research period, the average cash ratio of the chosen insurance companies was 0.34. Selected life insurance businesses had an average return on assets ratio of 0.34 compared to an average return on equity of 1.93.

According to the correlation table, the cash ratio and return on assets have a positive connection which shows that a rise in the liquidity ratio will result in an increase in the return on assets. The association between current ratio, quick ratio and return on assets is also negative and 1 substantial indicating that as liquidity increases, return on assets decreases. The liquidity ratios are insignificantly correlated with return on assets.

The correlation table shows that there is a negative association between the current ratio, quick ratio, cash ratio and return on equity, however it is insignificant at 0.05 levels. The liquidity ratios are negative correlated with return on equity, which indicating that a higher liquidity ratio decreases return on equity and it is insignificant at 0.05 levels. Return on equity is only marginally impacted by changes in liquidity.

According to the model summary, the coefficient of determination (R square value) explains both the amount that changes in the independent variables (current ratio, quick ratio, and cash ratio) can explain for changes in the dependent variable (ROA) and the percentage of variation in the dependent variable that is explained by these changes. According to the value of R-square, just 2.5 percent of the return on assets of life insurance companies in Nepal, can be accounted for by the independent variables (liquidity factors) that were investigated. However, this study is unable to explain the remaining 97.5 percentage. The model is a good predictor of the link between the dependent and independent variables, according to the outcome of significant value 0.000. The ANOVA test reveals a significance value of 0.761, greater than the alpha value of 0.05, indicating that the model is statistically insignificant in predicting how current ratio, quick ratio and cash ratio impact Nepalese life insurance firms' profits.

The coefficient of intercept $\theta\beta$ has a value of 0.316 and is insignificant at a 95% level of confidence. Return on assets for insurance businesses in Nepal was 0.316 according to the regression model, which held parameters (Current Ratio, Quick Ratio, and Cash Ratio) constant at zero. As a result, the return on assets will increase by 0.144 for every unit rise in the current ratio, decrease by -0.147 for every unit rise in the quick ratio and decrease by -0.102 for every unit increase in the Cash ratio. The outcome shows that, when return on assets is taken into account the beta coefficients for quick and Cash are negative. The liquidity ratios are statistically insignificant with profitability ratio return on assets.

According to the model summary, the coefficient of determination (R squared) explains how much of a change in the independent variables can explain a change in the dependent variable, or how much of the variation in the dependent variable (ROE) can be explained by the current ratio, quick ratio, and cash ratio. Only 8.5 percent of the return on equity of life insurance businesses in Nepal, as shown by the value of R-square, can be explained by the independent variables that were examined. Nonetheless, this study offers no explanation for the remaining 91.5 percent.

The standard error of estimate of 4.70237, which demonstrates the greater variability of the observation, is also shown in the model summary. The model is an excellent predictor of the link between the dependent and independent variables, as indicated by the significant value of 0.000 in the result. The model is statistically insignificant in predicting how the current ratio, quick ratio, and cash ratio affect the profitability of life insurance businesses in Nepal, according to the results of the ANOVA test, which indicates that the significance value is 0.249, which is larger than the alpha value of 0.05.

According to the regression model, the return on equity of insurance businesses in Nepal was 3.339 when the quick ratio and Cash ratio were held constant at zero. According to the results, a unit rise in the quick ratio will result in an increase in return on equity of 0.713 and insignificant at 95% confidence level. A unit rise in the current ratio will result in an increase in return on equity of -0.776, whereas a unit increase in the cash ratio would result in an increase in return on equity of -0.95. The outcome demonstrates that the beta coefficient for current and cash is considerable and negative with respect to return on equity. This demonstrates that cash affects return on equity in a unfavorable way. The beta coefficient for the liquidity ratio is similarly negative, positive, and negligible to the return on equity. It suggests that the impact of liquidity on return on equity is somewhat favorable.

The management of the organization constantly takes liquidity and profitability into consideration when assessing the company's financial standing. This study aimed to look at the link between life insurance firms' profitability and liquidity in Nepal. Using both a descriptive and research approach, the study was conducted. The research data was collected systematically over a ten-year period in order to address a research issue. This study used a sample of 5 Nepalese life insurance providers. Data collection was conducted through

secondary sources, including the annual reports of life insurance companies. In order to bolster the plan, the following specific goals have been established: In order to assess the financial health and liquidity of Nepalese life insurance firms, examining the link between life insurance firms' liquidity and profitability in Nepal to determine what factors, besides liquidity, have an impact on the financial health of Nepalese life insurance businesses.

The profitability and liquidity positions are assessed using the ratio analysis. The current ratio, quick ratio, Cash ratio, return on equity ratio, and return on assets ratio make up the measure ratio analysis. To investigate the impact of liquidity on business profitability, a correlation analysis is utilized. A process used to explore the connection between independent and dependent variables using multiple regressions. A two-tailed test with a 5% significance threshold was used to assess the results' significance. The data were examined using a statistical tool like SPSS 25 (statistical package for social sciences). According to the study's descriptive data, there has been more year-to-year variability in the liquidity and profitability positions of Nepal's life insurance businesses. This implies that the life insurance industry's liquidity and profitability are not stable. The current ratio, quick ratio, and Cash ratio all had an impact on the firms' profitability, the study discovered via the correlations analysis. Where cash ratio, quick ratio and current ratio are all favorably impacted on ROE.

Additionally, return on equity was negatively impacted by current ratio, quick ratio, and cash ratio. Regression study results suggest that only the cash ratio has a substantial impact on profitability, whereas the quick ratio has no meaningful impact. This supports the 2013 research by Lartey, Antwi, and Boadi who examined the link between the profitability and liquidity of banks that were listed on the Ghana Stock Exchange and found that the two variables had a very weakly positive correlation. Moreover, this result is consistent with Malik's (2011) study, which examined the factors influencing the profitability of Pakistani insurance businesses and discovered a negative but significant association between profitability and Cash ratio. This outcome also differs with that of Ajanthan's (2013) study, which examined the relationship between liquidity and profitability of Sri Lankan trading companies and found that the two are strongly correlated.

As per the empirical review of this study, Wambui & Wanjim (2016) studied the credit risk affected the corporate liquidity of Kenya's deposit taking microfinance institutions and

conducted Kenyan deposit taking microfinance institutions corporate liquidity is strongly impacted by credit risk with that impact being statistically significant. Ojha 2018 investigated how Nepalese commercial banks' profitability was affected by liquidity. and examine the forms and pattern of liquidity which finds there is significant relation between numbers of variables that impacts on the liquidity performance of Nepalese commercial banks.

Furthermore, Bencharles and Abubakar (2020) studied the Liquidity management's effects on Nigeria's conventional and Islamic banks' profitability and examined the effect of liquidity management on the profitability of Islamic and conventional banks in Nigeria which found the relationship between liquidity and profitability matched the risk return hypothesis. Hamal, Janga (2020) examined the effects of the cash ratio, liquidity ratio, company size, age of the business, and total debt on the profitability of non-life insurance firms in Nepal and discovered that the profits of the sector are not significantly correlated with the firm size, age of the firm, or total debt. Khati (2020) examined the profitability of Nepalese commercial banks is correlated with liquidity, and it was shown that assets quality (AQ) is positively correlated with return on equity but negatively correlated with return on assets. Between return on equity and return on Assets the cash deposit ratio shows a small but favorable correlation.

CHAPTER V

SUMMARY AND CONCLUSION

The summary, findings, and consequences of the research are covered in this last chapter. This chapter presents the data and conclusions from the secondary data analysis. The purpose of this study is to evaluate how liquidity affects the profitability of Nepalese life insurance businesses. The purpose of this study is to determine the connection between an insurance company's liquidity and profitability in Nepal. The findings from Chapter Four are summarized in this chapter.

5.1 Summary

This study was conducted to examine the relationship between life insurance businesses' profitability and liquidity. Analytical and descriptive research methods were employed in the study. The information used in the study was methodically acquired throughout time to address a particular research issue. This study used a sample of 5 life insurance companies. The information was gathered from secondary sources, including the life insurance companies' financial statements. Ratio analysis is used to evaluate the profitability and liquidity status. Current ratio, quick ratio, cash ratio, return on equity ratio, and return on assets make up the measure ratio analysis. The impact of liquidity on a company's profitability is investigated using a correlation study. The link between independent factors and dependent variables was investigated using a multiple regression analysis. A 2-tailed test with a 5% significance threshold was used to assess the results' significance. To analyze the data, a statistical tool like SPSS 25 (statistical package for social sciences) was utilized.

Based on the financial ratio analysis, MetLife and ALICL had the best current ratio and quick ratios out of the five life insurance companies in the study. Because the companies MetLife and ALICL keep their current ratio and quick ratio within acceptable bounds. Using correlations analysis, the study found that the current ratio, quick ratio, and cash ratio had an impact on the businesses' profitability. While return on assets was positively impacted by the current ratio, quick ratio, and negatively impacted on cash ratio. The return on equity was negatively impacted on current ratio and quick ratio, and positively impacted on Cash ratio. According to the findings of the regression study, the liquidity ratio has no meaningful impact on profitability.

5.2 Conclusion

The analysis comes to the conclusion that MetLife and ALICL have the best current ratio and quick ratio among the five life insurance companies examined. An appropriate current ratio and quick ratio are maintained by MetLife and ALICL firms. For improved performance, other organizations in the study need to lower their liquidity position. Short-term investments and more liquid assets are taken into consideration by the CR and QR ratio. A high degree of financial liquidity is sought after, which means holding a substantial portion of current assets, particularly cash. Less borrowing is required by the firm MetLife, and its levels of liquidity are healthy. LICL outperforms other corporations in terms of return on equity. The return on assets of NALIC businesses is outstanding.

The study also finds a weak negative correlation between the, quick ratio, cash ratio and return on assets in Nepalese life insurance businesses. The study's findings indicate that there is a weak but unfavorable correlation between a company's return on assets and its current ratio and quick ratio. This means that companies that sell life insurance and have less liquidity cannot earn higher rates of return on their assets. The study comes to the conclusion that in insurance firms, cash ratio and ROA have a substantial positive association. This indicates that insurance firms can control their financial exposure to unforeseen pay off debt. This study came to the conclusion that there are other factors besides liquidity that affect profitability since changes were not entirely explained by changes in the independent variable in the dependent variable (profitability). This is consistent with Shrestha's (2018) research, which examined the link between liquidity management and the profitability of businesses, and found that other factors also affect ROA.

The results of the study indicate that there is a weak and negative association between ROE and (current ratio, quick ratio and cash ratio) in Nepalese life insurance businesses. The current ratio, quick ratio and cash ratio show a no favorable and unimportant association with a company's return on equity, according to the research findings. As a result, life insurance businesses with greater liquidity are unable to achieve greater returns on equity. The study finds that liquidity ratios and ROE in insurance businesses have a substantial insignificant association. As a result, insurance firms are unable to control their financial vulnerability to unforeseen losses.

5.3 Implication

Managers should strike a balance between their firms' profitability and liquidity. This indicates that they should continue to balance liquidity and profitability. In terms of an organization's financial standing, profitability is crucial. Since profitability and liquidity management are essential to life insurance firms' existence, they should focus not just on maximizing profits but also on taking steps to guarantee adequate liquidity management. The methods will aid in reducing or preventing instances of excess and insufficient liquidity.

The study's conclusions showed that the quick ratio as a liquidity indicator had no discernible impact on the Nepal life insurance company's profitability. For this reason, the report suggests that management of the companies concentrate on locating promising investment prospects in the operational environment. It is imperative that firms have strategies that guarantee sufficient management of their liquidity. In addition to liquidity, the management of life insurance companies should identify and address any other factors that may be detrimental to their profitability. Because a company's profitability is impacted by liquidity, it is imperative that firms manage their liquidity well. But not too much liquid assets should be present.

- i. In order to ascertain the link between life insurance firms' profitability in Nepal, this study was conducted. Conducting comparable research in other non-life insurance sectors is advised. As there are legal requirements requiring a specific level of liquidity to be maintained, the study concentrated on insurance businesses.
- ii. Only five life insurance providers in Nepal were looked at in the current study. Additionally, only data from 10 fiscal years have been reviewed. Therefore, in order to increase the validity of future research, it should employ more scientific instruments and analysis and cover as many more businesses and years as feasible.
- iii. As an alternative to the three independent variables utilized in this study. The study suggests using other independent factors. The study found that quick ratio, a liquidity indicator, had no discernible impact on the profitability of Nepalese life insurance firms. Nevertheless, it suggests further research into any additional variables that could have an impact.

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Appendix - I

From annual report of Insurance Companies during the period of 2013-2014 to 2022-2023

	Fiscal Year	NALIC	NELICL	LICL	MetLife	ALICL
Total Assets	2013-2014	11,881,488,612	20,020,644,910	17,211,666,674	9,974,099,951	11,881,488,612
	2014-2015	14,188,427,735	27,081,894,202	22,564,609,776	11,319,073,795	14,188,427,735
	2015-2016	17,035,224,112	36,302,202,025	29,264,203,612	13,074,740,469	17,035,224,112
	2016-2017	20,810,065,070	50,745,147,864	37,902,499,687	15,163,705,178	20,810,065,070
	2017-2018	27,418,564,483	62,880,324,199	47,092,370,436	18,022,848,339	27,418,564,483
	2018-2019	34,957,960,764	77,819,058,027	59,468,533,583	20,420,510,761	34,957,960,764
	2019-2020	42,963,351,856	101,781,944,244	73,310,341,076	22,801,061,497	42,963,351,856
	2020-2021	56,296,864,267	127,279,287,540	87,760,894,232	24,509,764,933	56,296,864,267
	2021-2022	64,494,453,124	190,918,931,310	131,641,341,348	25,864,666,084	64,494,453,124
	2022-2023	103,191,124,998	180,476,172,260	114,431,009,169	28,914,196,219	42,744,437,288
Shareholders Equity	2013-2014	11,099,944,639	18,905,089,640	16,526,611,101	9,284,479,620	11,099,944,639
	2014-2015	13,385,034,833	25,650,026,722	21,507,537,088	10,516,149,002	13,385,034,833
	2015-2016	16,113,670,925	34,638,264,105	28,051,066,106	12,118,283,234	16,113,670,925
	2016-2017	19,481,159,711	47,308,314,682	35,252,815,528	14,256,402,655	19,481,159,711
	2017-2018	2,826,011,754	9,773,149,606	3,150,423,304	16,827,700,530	2,826,011,754
	2018-2019	4,349,680,073	9,257,543,829	3,447,959,698	18,633,007,259	4,349,680,073
	2019-2020	4,736,960,617	9,266,524,818	3,626,172,140	20,288,261,225	4,736,960,617
	2020-2021	5,705,681,063	11,083,949,447	4,413,667,889	21,424,238,879	5,705,681,063
	2021-2022	6,315,743,491	12,192,344,392	6,620,501,834	23,140,712,232	6,315,743,491
	2022-2023	7,894,679,364	11,795,059,734	5,976,338,398	3,802,791,440	3,675,940,919
Current Assets	2013-2014	8,322,977,153	9,177,414,383	7,900,293,236	6,761,032,607	8,322,977,153
	2014-2015	10,067,204,787	18,143,902,304	13,862,007,015	9,852,381,517	10,067,204,787
	2015-2016	10,356,827,825	26,164,551,007	19,256,192,230	10,108,998,503	10,356,827,825
	2016-2017	5,613,762,092	30,153,826,908	10,219,041,154	12,114,147,121	5,613,762,092
	2017-2018	4,461,364,543	62,490,740,846	46,860,495,285	15,325,170,798	6,796,705,716
	2018-2019	6,095,860,800	28,407,407,202	59,206,410,368	16,728,198,927	8,446,422,751
	2019-2020	41,817,742,680	101,420,044,757	73,047,251,496	18,309,576,451	41,817,742,680
	2020-2021	55,089,732,972	126,970,368,260	87,495,274,810	20,023,971,310	56,012,527,984
	2021-2022	62,958,164,539	139,667,405,086	131,242,912,215	7,054,248,395	66,026,660,438
	2022-2023	72,401,889,220	25,360,991,962	18,674,107,586	28,726,172,648	8,494,333,011
Current Liabilities	2013-2014	179,734,259	449,611,662	635,044,094	172,882,172	179,734,259
	2014-2015	286,280,982	651,984,773	935,797,994	193,626,256	286,280,982
	2015-2016	338,145,519	807,368,890	1,015,891,096	216,880,005	924,496,016
	2016-2017	382,681,459	1,166,664,004	2,020,487,682	191,262,063	382,681,459
	2017-2018	564,392,776	52,969,581,999	43,941,947,132	216,648,732	564,392,776
	2018-2019	1,196,125,415	2,443,978,988	56,020,573,885	286,097,609	650,698,597
	2019-2020	38,104,172,915	92,306,982,901	69,664,305,225	346,087,193	38,104,172,915
	2020-2021	50,461,358,300	115,888,686,960	83,327,564,371	383,946,414	2,738,605,793
	2021-2022	58,085,542,869	133,271,990,004	116,658,590,119	344,752,546	2,544,059,650
	2022-2023	63,894,097,156	140,880,365,592	108,454,670,771	25,111,404,779	39,068,496,369
Quick Assets	2013-2014	7,852,266,000	9,157,885,507	7,872,095,702	6,706,812,331	8,317,278,178
	2014-2015	10,063,281,014	18,131,724,322	13,841,156,339	9,833,178,023	10,063,281,014
	2015-2016	10,353,884,995	26,155,598,920	19,241,519,336	10,096,540,682	10,353,884,995
	2016-2017	5,611,800,206	30,148,100,716	10,209,326,566	12,105,744,711	5,611,800,206
	2017-2018	4,461,364,543	62,490,740,846	46,860,495,285	15,320,841,493	6,796,705,716
	2018-2019	6,095,860,800	28,407,407,202	59,206,410,368	16,727,439,666	8,446,422,751
	2019-2020	41,817,742,680	101,420,044,757	73,047,251,496	18,309,576,451	41,817,742,680
	2020-2021	55,089,732,972	126,970,368,260	87,495,274,810	20,023,971,310	56,012,527,984
	2021-2022	62,958,164,539	133,318,886,673	131,242,912,215	7,054,248,395	66,026,660,438
	2022-2023	75,549,797,447	96,349,042,519	3,473,136,736	18,309,576,451	20,440,971,237

	2013-2014	170,878,952	181,557,233	245,890,512	30,254,022	87,659,989
	2014-2015	317,240,808	586,338,759	458,043,769	76,783,755	214,498,737
	2015-2016	133,895,571	188,562,185	471,359,944	81,738,285	537,850,323
	2016-2017	328,026,181	541,184,565	610,036,348	147,317,586	787,914,012
Cash & Cash	2017-2018	666,554,129	2,862,016,067	1,132,959,347	8,402,334	696,175,867
Equivalents	2018-2019	786,223,119	8,050,479,882	2,355,660,021	121,348,153	988,136,256
	2019-2020	959,694,401	11,786,994,934	2,839,773,190	130,615,378	883,805,960
	2020-2021	1,112,134,690	16,778,553,384	3,291,939,010	220,985,887	373,142,319
	2021-2022	1,308,134,833	11,786,994,934	1,978,526,514	217,595,545	439,660,714
	2022-2023	1,635,168,541	4,627,558,471	2,449,593,817	385,479,011	467,060,873
	2013-2014	252,514,776	614,111,885	194,829,700	87,072,924	252,514,776
	2014-2015	263,707,686	527,555,789	249,042,175	68,007,096	263,707,686
	2015-2016	349,719,304	906,634,254	321,435,018	344,135,750	349,719,304
	2016-2017	409,153,790	1,004,634,123	134,973,897	460,410,265	409,153,790
Net Profit	2017-2018	511,281,492	1,453,842,041	1,406,425,352	558,330,847	511,281,492
	2018-2019	380,380,860	1,336,303,963	296,772,180	558,192,767	380,380,860
	2019-2020	739,197,008	1,108,130,708	719,824,405	678,357,180	739,197,008
	2020-2021	692,888,754	1,966,499,552	745,121,534	351,090,897	692,888,754
	2021-2022	736,459,303	2,064,824,530	856,889,764	596,567,442	736,459,303
	2022-2023	1,472,918,606	2,011,223,910.00	753,449,166	765,461,031	376,769,045

Appendix II

SPSS Output Data - 1 Correlations Coefficient

		ROA	ROE	CR	QR	CSR
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	50				
ROE	Pearson Correlation	.687**	1			
	Sig. (2-tailed)	0				
	N	50	50			
CR	Pearson Correlation	-0.047	-.280*	1		
	Sig. (2-tailed)	0.747	0.049			
	N	50	50	50		
QR	Pearson Correlation	-0.05	-0.278	1.000**	1	
	Sig. (2-tailed)	0.73	0.051	0		
	N	50	50	50	50	
CSR	Pearson Correlation	0.093	-0.064	0.156	0.153	1
	Sig. (2-tailed)	0.519	0.658	0.28	0.289	
	N	50	50	50	50	50

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

* . Correlation is significant at the 0.05 level (2-tailed).

SPSS Output Data - 2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157 ^a	0.025	-0.039	0.6932

Sources: SPSS output result

a. Predictors: (Constant), CR, QR, CsR

SPSS Output Data - 3

ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	0.561	3	0.187	0.389	.761 ^b
Residual	22.104	46	0.481		
Total	22.665	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), LR, QR, CR

SPSS Output Data - 4
Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.316	0.152		2.083	0.043
CR	0.144	0.193	4.241	0.747	0.459
QR	-0.147	0.193	-4.303	-0.758	0.452
CsR	-0.102	0.167	-0.09	-0.608	0.546

a. Dependent Variable: ROA

SPSS Output Data - 5
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291 ^a	0.085	0.025	4.70237

a. Predictors: (Constant), CR, QR, CsR

SPSS Output Data - 6
ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	94.245	3	31.415	1.421	.249 ^b
Residual	1017.17	46	22.112		
Total	1111.41	49			

a. Dependent Variable: ROE

b. Predictors: (Constant), CR, QR, CsR

SPSS Output Data -7
Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.339	1.028		3.247	0.002
CR	-0.776	1.306	-3.269	-0.594	0.555
QR	0.713	1.311	2.992	0.544	0.589
CsR	-0.095	1.136	-0.012	-0.084	0.933

a. Dependent Variable: ROE

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ABSTRACT In this study, the link between life insurance company's liquidity and profitability during the years 2013/2014 to 2022/23 is examined. The research covers five of the fourteen

life insurance companies that are **listed on the** Nepal **insurance board. The** research employed **secondary data. Data and information** were gathered **from** the Nepal **insurance board and**

selected life insurance companies annual reports. The study's conclusions were supported by financial instruments, multiple regression analysis, correlation analysis, and descriptive statistical analysis. ROA and ROE were used to gauge profitability, whereas current ratio, quick ratio and cash ratio were used to measure liquidity. The statistical program for social science SPSS software, version 25, was used to conduct the analysis. Based on the findings Nepal life insurance companies have an excessive amount of money but no stability. The current ratio, quick ratio and return on assets have a negative connection which shows that a rise in the liquidity ratio will result in an decrease in the return on assets. The association between cash and return on assets is also positive and substantial indicating that as cash increases, return on assets also increases. The liquidity ratios are insignificantly correlated with return on assets. There is a negative association between the current ratio and cash ratio with return on equity however it is insignificant at 0.05 levels. The quick ratio and return on equity have a positive association, indicating that a higher liquidity ratio decreases return on equity and it is significant at 0.05 levels. Return on equity is only marginally impacted by changes in liquidity. Cash Ratio and return on equity are positively correlated and significantly correlated. Keywords: Liquidity, Profitability, Return on Assets, Return on Equity, Current Ratio, Quick Ratio, Cash Ratio ii

CHAPTER I INTRODUCTION 1.1 Background of the study Liquidity management **is**

critical for any firm since it involves paying current commitments on business, which consist of short-term operating expenses and maturing long-term debt. In any firm, liquidity ratios such as the current ratio, quick ratio, and acid test ratio are used to manage