IMPACT OF LIQUIDITY ON PROFITABILITY OF NEPALESE COMMERCIAL BANKS

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

By

Sagun Gurung

Campus Roll No: 3087/075

Exam Symbol No: 13931/019

Registration No: 7-2-361-12-2013

Shankar Dev Campus

Kathmandu

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Impact of Liquidity on Profitability of Nepalese Commercial Banks". The work of this dissertation has not been submitted previously for the purpose of conferral of any degree nor has it been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declared that all information sources and literature used are cited in the reference section of the dissertation.

Sagun Gurung

October 2023

REPORT OF RESEARCH COMMITTEE

Ms. Sagun Gurung has defended research proposal entitled "Impact of Liquidity on Profitability of Nepalese Commercial Banks ", 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 Asso. Prof. Dr. Kapil Khanal and submit the thesis for evaluation and viva voce examination.

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Asso. Prof. Dr. Kapil Khanal

 (Supervisor)

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Dissertation Proposal Defended Date

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Asso. Prof. Dr. Sajeeb Kumar Shrestha

Head of Research Committee

…………………………………….
Dissertation Submitted Date

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Dissertation Viva Voce Date

APPROVAL SHEET

We have examined the dissertation entitled "Impact of Liquidity on Profitability of Nepalese Commercial Banks " presented by Ms. Sagun Gurung for the degree of Masters of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

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Asso. Prof. Dr. Kapil Khanal

Dissertation Supervisor

_____

Internal Examiner

_____

External Examiner

_____

Asso. Prof. Dr. Sajeeb Kumar Shrestha
Chairperson, Research Committee

_____

Asso. Prof. Krishna Prasad Acharya
Campus Chief
October, 2023

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ABBREVIATIONS

ANOVA	:	Analysis of Variance
CACL	:	Current assets to current liabilities
CBTD	:	Cash and Bank balance to Total Deposit
EBL	:	Everest Bank limited
EBL	:	Everest bank limited
ETA	:	Equity to Total Assets
GDP	:	Gross Domestic Product
HBL	:	Himalayan bank Limited
KBL	:	Kumari Bank Limited
LATD	:	Loan and Advance to Total Deposit
NABIL	:	Nabil Bank Limited
NBL	:	Nepal bank Limited
NLTL	:	Non Performing Loan to Total Assets
NPL	:	Non-performing Loan
NRB	:	Nepal Rastra Bank
ROA	:	Return on Assets
ROE	:	Return on Equity
SD	:	Standard Deviation
SPSS	:	Statistical Package for the Social Sciences
USA	:	United State of America

ABSTRACT

The objectives of research are to examine the current position of the liquidity and profitability of a commercial bank in Nepal, to analyze the relationship between liquidity and profitability of a commercial bank in Nepal and to examine the any impact of the liquidity toward profitability of a commercial bank in Nepal. Descriptive research design is for the achievement of objectives on related to the current status of the variables. Casual comparative research design for achievement of objective two and three for achievement of objectives two and three related to the relationship and impact independent and dependent variables is used. All the commercial bank in Nepal are the population of the research and 3 commercial bank are the selected using judgmental sampling because of the one is joint venture bank, one is private bank and one is government bank selected under studies. Data are secondary nature and collected from the annual report of the concern bank. Financial and statistical analysis is done for the achievement of the objectives. The finding of the studies are the current status of the variables of the research are fluctuating nature because the value of the minimum is very low and maximum is very high and the different between minimum with mean and maximum with mean is very high. The standard deviation of the series of data is very high, the high standard deviation represent the fluctuation of the data is high. The relationship between assets quality, credit deposit and cash deposit with return on assets is positive but not significant. Leverage and return on assets relationship is positive and significant. Assets quality and return on equity relationship is negative with not significant. Credit deposit and leverage has negative and significant relation to the return on equity. Cash deposit and return on equity relationship is positive and significant. The impact of assets quality and credit deposit to the return on assets is negative but not significant. Cash deposit positive impact to the return on assets but not significant. Leverage has positive impact with significant to the return on assets. Assets Quality, Credit Deposit Ratio and Leverage has negative and not significant impact to the return on assets. Cash deposit ratio has positive and but not significant impact to the return on equity.

Keywords: Assets Quality, Credit Deposit Ratio, Cash deposit ratio, Leverage and Profitability

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The liquidity in the commercial bank represents the ability to fund its obligations by the contractor at the time of maturity, which includes lending and investment commitments, withdrawals, deposits, and accrued liabilities (Amengor, 2010).

The management of liquidity is an important aspect of corporate operations. The firm should have the necessary level of liquidity for the very survival of the business. It shouldn't be too much or not enough. The accumulation of ideal money is a sign of excessive liquidity. This could result in decreased profitability, increased speculating, and unwarranted extension. While insufficient cash causes business operations to be interrupted. A proper balance between these two extreme situations therefore should be maintained for efficient operation of business through skill full liquidity management (Alshatti, 2014).

Profitability of a bank on the other hand entails the capability to generate income which surpasses liability (Olagunju, 2012). Potential investors give the profitability ratios more thought since they are concerned about the bank dividend and the rise in stock price. Because low profit margins would deter investors from making investments, managers are interested in gauging operating performance in terms of profitability so that effective management can be put in place to inspire confidence in potential investors and ensure the success and survival of the banking industry. Additionally, equity investors are more concerned with the bank's ability to earn, sustain, and raise income; stakeholders expect the bank to boost lending in order to provide them the highest return on their investment, while depositors expect the bank to preserve a large amount of idle capital in order to maintain proper operations (Ibbih, 2018).

Commercial banks confront liquidity management challenges, such as determining the right mix or balance of profitability and liquidity, in order to achieve financial equilibrium, which will place both aims at their highest level. Identification of the relationship between profitability and liquidity (including the significance of the relationship on bank performance, the magnitude of the relationship, and its direction), the effects of liquidity

on bank profitability, and the main triggers or causes of liquidity problems in commercial banks are persistent issues that call for precise evidence for appropriate decision-making.

At the moment, Nepal's national and financial systems are both experiencing liquidity issues. A variety of sectors were impacted by the liquidity issue. The present issue with time liquidity makes this research pertinent at this point. The bank has closed the entire loan due to the financial crisis. The banks' liquidity issues are to blame. The rationale behind this research is the increase in organization profit. Each business's primary goal is to maximize profits. Research connected to profitability and liquidity must be logical if it is to be valid at this time.

1.2 Problem Statement

The management of liquidity for a bank is just as challenging as it is for non-manufacturing organizations. Commercial banks are outstanding financial entities that contribute significantly to the health of the economy as a whole. A commercial bank is more accountable than any other type of financial organization. The majority of them are prepared to pay a sizeable portion of their liabilities immediately and without prior notice. The bank gathers money from several deposit kinds to fund loans and advances to various industries. Commercial banks must make an effort to raise both their investment and cash from deposits to obtain a higher return.

Leveraging public savings and providing loans to those in need are the primary goals of the banking industry. However, commercial banks constantly struggle with how to use additional deposits and disburse loans without increasing their cash balance due to their significant depositor liability obligations that come with unforeseen demands. Large idle cash balances, however, also affect banks' capacity to make a profit. No longer in doubt is the necessity of managing liquidity for a nation's economic success. The difficulty of mobilizing resources, however, is a serious one. Twenty-six commercial banks exist in Nepal as of 2022, and these institutions are highly valued for their contribution to the mobilization of domestic resources. The problem associated with the commercial banks related to the liquidity management and reinvestment aspects are highlighted below.

- What is the current position of the liquidity and profitability of a commercial bank in Nepal?
- What is the relationship between liquidity and profitability of a commercial bank in Nepal?

- Is there any impact of the liquidity toward profitability of a commercial bank in Nepal?

1.3 objective of the study

The main objectives of the study were:

- To examine the current position of the liquidity and profitability of a commercial bank in Nepal.
- To analyze the relationship between liquidity and profitability of a commercial bank in Nepal.
- To examine the any impact of the liquidity toward profitability of a commercial bank in Nepal.

1.4 Hypothesis

Hypothesis 1

There is a significant relationship between liquidity and profitability of a commercial bank in Nepal.

Hypothesis 2

There is the significant impact of the liquidity toward profitability of a commercial bank in Nepal.

1.5 Rational of the Study

Liquidity is the basic Fonda of the organization for servable in day to day business activities. Running of the business is very good if proper liquidity management system is implementing. Proper liquidity management system mean to maintain exactly required amount of liquidity level is maintain. If higher the liquidity in the company its make the company resource utilization related lacking is come out. If low level of the liquidity in the company it's also affect and may its goes to the way of short down of the company.

Currently Nepal is facing the problem of liquidity in the banking and national level. Problem of liquidity made a various sector affects. This research is appropriate for this time because of the current time liquidity problem. The entire loan is closed by the bank because of financial crisis. It's because of the liquidity problem of the banks. This research is rational because of the improvement of the profit of the organization. Profit is the main aim of the each company. The making profit is the main feature   profit making company. Banks are the profit making nature of company. Liquidity factor is the main factor of company

success. Success is measure in profitability terms. The rationality of liquidity and profitability is very crucial in this time.

1.6 Limitations of the Study

This study is subject has following limitations:

- This study select selected thee commercial banks have been taken into consideration for the studied namely EBL, KBL and NBL.
- This study covers data and information only for 10 years, i.e. from fiscal year 2012/13 to 2021/22.
- This study based on the secondary data and information from selected bank annual report.

CHAPTER-II

LITERATURE REVIEW

The literature reviews are in chapter two. Reviews of the literature on the topics of commercial bank profitability and liquidity are included here. The first of these three sections is the conceptual reviews. Empirical reviews are in the second section, while the research deficit is in the third.

2.1 Theoretical Review

Assets Quality

The assets quality (A) indicator shows how much credit risk is currently present in the loan and investment portfolio. It addresses the loan's quality, which shows the institutions' profits. When evaluating an asset's quality, one must rank the potential investment risks that the company may experience and contrast them with capital gains. When compared to the company's book value and investments, examiners also look at how many other companies are impacted by fair market value of investments. The effectiveness of an institution's investment policies and practices reflects the quality of its assets. Lending activities of the bank account for a sizeable portion of its revenue.

The effectiveness of the institution's risk management system will have a significant impact on the quality of assets, especially loan assets and investments. A variety of metrics can be used to describe the quality of the assets that banks hold. A rising trend in the percentage of non-performing loans to total loans denotes a decline in the credit portfolio quality, which has an impact on the cash flow and net income of financial institutions. Especially if impaired loans have not yet been categorized as non-performing, it is frequently beneficial to complement with data on non-performing loans net of provisions and on the ratio of provision plus internet suspension on impaired loans to total loans (Kolb & Rodrigeuz, 1996).

Profitability

The capacity of a bank to generate enough revenue or to reduce operating costs, meaning being more effective, is what determines its profitability. The firm's returns on asset (ROA), return on equity (ROE), and net interest margin (NIM) ratios are used to quantify it. These ratios summarize a significant amount of financial data and allow for the qualitative assessment of the firm's profitability (Velnampy & Niresh, 2012). The ratio of income to

total assets is called the ROA. It shows how well a company's management uses all of the resources available to it to produce net income (Khrawish, 2011). The profitability of banks depends on both internal and external variables. External factors include both industry-specific and macroeconomic issues, whereas internal ones are bank-specific (Al-Tamimi, 2010). Internal factors fall under the purview of the bank and are impacted by internal choices made by the management and board. They vary from one bank to the next. These factors include labor productivity, the state of information technology, capital size, deposit liabilities size, credit portfolio size and composition, interest rate policy, risk level, management caliber, bank size, ownership, and similar factors (Ongore & Kusa, 2013).

Leverage

Leverage is a tool used in financial analysis to quantify risk. Leverage displays the company's financial, operational, and investment-related risk. A leverage ratio is one of many financial metrics that examines the amount of capital that is borrowed (in the form of loans) and evaluates a company's capacity to pay its debts. Because businesses typically employ a combination of debt and equity to fund their operations, the leverage ratio category is crucial. Knowing how much debt a company has can help determine if it will be able to pay off its loans when they are due (https://www.investopedia.com).

Credit Deposit Ratio

Credit-Deposit The ratio represents the portion of loan assets that a bank generates from deposits received. Credits are the name for bank advances and loans. In other words, it refers to the amount that a bank subsequently recovers from a person or a company that it lent money to. The borrower is charged interest. Deposit is the amount that a bank accepts from depositors in exchange for interest (Singh & Tandon, 2012).

$$\text{Credit-Deposit Ratio } (\%) = \frac{\text{Loan and Advance}}{\text{Total Deposit}}$$

Cash Deposit Ratio

The cash-to-deposit ratio measures how much a bank lends in relation to the deposits it has mobilized. It reveals how much of a bank's core finances are going toward lending, which is the primary banking activity (Goel & Kumar, 2016). It is calculated as:

$$\text{Cash Deposit Ratio} = \frac{\text{cash and bank balance}}{\text{total deposit}}$$

2.2 Empirical Review

2.2.1 Article Reviews in International Content

Maxim (2023) measured the impact of liquidity on profitability, represented by the rate of return on capital employed (ROCE) for companies in the retail trade industry in Romania. The independent variable liquidity conversion cycle was also taken into account in the research, the result of the regression applied to the panel data referring to the analyzed period of 9 years, 2013-2021, showing that among the independent variables, the current liquidity rate, the cycle liquidity conversion, total assets and dependent variable ROCE, there are significant and negative relationships. Also, between the independent variables the immediate liquidity rate, the turnover and the dependent variable ROCE, there is a significant but positive relationship, the conclusion being that paying more attention to the cash conversion cycle but also to the current liquidity rate, can cause increase in the profitability of companies in the Romanian retail industry.

Sany and Yonatan (2023) examined effect of liquidity on profitability of publicly listed retail companies on the Indonesian Stock Exchange (IDX). This study uses firm size and Working Capital Management (WCM) efficiency as control variables. The sample in this study consisted of 15 publicly listed retail companies in the period of 2014-2019. All variables are measured by a ratio scale. Profitability is proxies by return on assets. Data was analyzed with panel data regression using a fixed effect model. This study shows that liquidity has a positive and significant effect on profitability when measured using the current ratio. In addition, company size has a significant positive effect on profitability. A higher composition of current assets to current liability improves profitability. On the other hand, Cash Conversion Cycle (CCC) as a proxy of WCM efficiency has a significant negative correlation with profitability. This research findings contribute to understanding of the impact of liquidity, firm size and CCC on profitability in retail industry

Atabaeva et al. (2022) examined the liquidity ratio of the Kyrgyz banking system. They found that the work showed a negative correlation between liquidity and the economic development of Kyrgyzstan. Economic growth is not benefited by the high liquidity ratio of the Kyrgyz banking sector. In addition, for Kyrgyzstan, no significant correlation between deposit volume and liquidity ratio was found.

Hasmiana et al. (2022) explored the effect of financial risk, capital structure, and liquidity on operational efficiency (2) to partially analyze the effect of financial risk, capital

structure, liquidity, and operational efficiency on (3) to analyze partially the effect of financial risk, capital structure, and liquidity on profitability through operational efficiency at State-Owned Banks and Private Commercial Banks. Purposive sampling was used as the method of data gathering. Quantitative data and secondary data sources are employed, and they can be acquired from the website https://www.idx.co.id/. (1) Financial risk, capital structure, and liquidity partially had a substantial impact on operational effectiveness, according to the findings. (2) Profitability was significantly impacted by financial risk, capital structure, liquidity, and operational effectiveness. (3) Profitability through operational efficiency is not significantly impacted by financial risk, capital structure, or liquidity.

Olaleye et al. (2021) explored Johansen test revealed at most two co-integrating equations among the variables, while result of vector error correction revealed a positive effect of liquidity on return on asset and return on equity but a negative effect on net profit margin. Results found that fairly stable trend in the liquidity and profitability indicators from 1998-2018 and concluded that banks controlled enough liquidity to serve their obligations.

Paul et al. (2020) explored the effect of liquidity on profitability. Following a correlation and regression study, it was shown that LAR and CR were not significant, while LDR, DAR, and CDR had a significant impact on profitability as evaluated by ROE. Thus, it can be said that, generally speaking, the profitability in Bangladesh's commercial banking sector is significantly impacted by the influence of liquidity. Bangladeshi banks will be in the greatest position to maintain parity between their liquidity and profitability by depending on this research.

Khati (2020) revealed the relationship between the liquidity and the profitability of commercial banks in Nepal. This study is based on the secondary data, which are extracted from Bank Supervision Reports published by Nepal Rastra Bank and annual reports of the selected commercial banks. The liquidity indicators are credit-deposit ratio (CDR), cash-deposit ratio (CADR) and assets quality (AQ), while return on equity (ROE) and return on assets (ROA) are the proxies for profitability. He use Hausman test and thereafter fixed effects approach, he found that assets quality (AQ) has negative and significant relationship with return on assets (ROA) whereas it has positive and significant relationship with return on equity (ROE). Cash deposit ratio (CADR) has positive and insignificant relationship with return on assets (ROA) and return on equity (ROE). Also the study reveals that credit-

deposit (CDR) has positive but insignificant relationship with ROA and has negative and insignificant relationship with return on equity (ROE).

Abbas et al. (2019) explored the influence of bank capital, bank liquidity level and credit risk on the profitability of commercial banks in the post crisis period between 2011 and 2017 in Asian developed economies in comparison with the USA banking industry. They found that bank capital and credit risk influence profitability in Asian developed economies similar to in the USA commercial banks, whereas the impact of liquidity on the profitability of the USA large commercial banks is negative and positive on Asian developed economies commercial banks in the post crisis era. The findings indicate that a 6% increase in capital leads to a 1% increase in profit, a 3.5% increase in liquidity leads to a 1% increase in profit. Specifically, larger banks generate 1% profit against a 1% increase in liquid assets. Medium size banks make 1% profit against a 3% increase in liquid assets, and small size banks produce 1% profit against a 7% increase in liquid assets. The findings show that liquidity influences profitability more intensively than capital, whereas the sign of coefficients is similar for large, small and medium-size.

Ojha (2017) explored the form and pattern of liquidity, NPL, return on assets, CAR, and return on equity, GDP, inflation and interbank rate in Nepalese commercial banks. The study is intended to analyze the relationship between liquidity and bank specific variables in Nepalese commercial banks. The panel data of commercial banks from 2010/11 to 2016/17 has been taken for the purpose of the research. Mean, standard deviation, correlation and multiple regression analysis have been used to diagnose date to meet the specific objectives of research. The results reveal that there is significant influence of ROA, ROE, NPL, GDP and IBR on LIQ. He found that there is significant relationship between numbers of variables that impacts on the liquidity performance of Nepalese commercial banks.

Alshatti (2014) revealed the liquidity management on profitability in the Jordanian commercial banks during the time period (2005–2012). Thirteen banks have been chosen to express on the whole Jordanian commercial banks. The liquidity indicators are investment ratio, Quick ratio, capital ratio, net credit facilities/ total assets and liquid assets ratio, while return on equity (ROE) and return on assets (ROA) were the proxies for profitability. Augmented Dickey Fuller (ADF) stationary test model was used to test for a unit root in a time series of the research variables and then testing hypothesis by using

regression analysis. He found that a positive effect of the increase in the quick ratio and the investment ratio of the available funds on the profitability, while there is a negative effect of the capital ratio and the liquid assets ratio on the profitability of the Jordanian commercial banks.

Lukorito et al. (2014) determined the effect of internal factors on profitability of commercial banks in Kenya particularly the banks liquidity. The study employed a descriptive research design incorporating panel data. All the 43 Commercial banks in Kenya formed the population and a census was done over a period of 5 years from 2009 to 2013 due to availability of data. This study used secondary data obtained from the annual published financial statements which were analyzed using descriptive and inferential statistics. Internal factor was Liquidity, while Profitability was measured using ROA ratios. They found that all the variables Liquidity, has statistically significant and positive relationship with banks' profitability. This study recommends that banks should invest heavily in assets if substantial gains have to be realized, maintain adequate liquidity levels though in the form of short term marketable securities in order to realize profits and aggressively identify viable investment opportunities and link such opportunities to customer deposits.

Akter and Mahmud (2014) revealed the relationship between liquidity (measured as current ratio) and profitability (measured as return on assets) in the banking industry in Bangladesh. They have considered twelve banks in four different sectors (Government banks, Islami banks, multinational banks and private commercial banks). They use linear regression to find out the extent of relationship between bank's liquidity and profitability (significance level was 10%). Individually all the sectors show no significant relationship between liquidity and profitability. Even the overall banking industry shows the same result. They considers year just before recession (2006) to post-recession (2011). They showed graphically how liquidity and profitability of these sectors varied over last couple of years. Government banks showed variable liquidity, while other sectors were steady. But, there were many fluctuations in profitability in between these times in all the sectors. They concluded that based on our sample and category, there is no significant relationship between liquidity and profitability in banks of different sectors in Bangladesh.

Lartey et al. (2013) explained the relationship between the liquidity and the profitability of banks listed on the Ghana Stock Exchange. Seven out of the nine listed banks were involved

in the study. The study was descriptive in nature. It adopted the longitudinal time dimension, specifically, the panel method. Document analysis was the main research procedure adopted to collect secondary data for the study. The financial reports of the seven listed banks were studied and relevant liquidity and profitability ratios were computed. The trend in liquidity and profitability were determined by the use of time series analysis. The main liquidity ratio was regressed on the profitability ratio. They found that for the period 2005-2010, both the liquidity and the profitability of the listed banks were declining. They also found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana.

Adebayo et al. (2011) explored liquidity management and commercial banks' profitability in Nigeria. The objectives are to find empirical evidence of the degree to which effective liquidity management affects profitability in commercial banks and how commercial banks can enhance their liquidity and profitability positions. Considering the nature of the survey, quantitative methods of research were applied. The data obtained from the Primary and Secondary sources were analyzed through collection, sorting and grouping of the data in tables of percentages and frequency distribution. They formulated a hypothesis, which were statistically tested through Pearson correlation data analysis. They found that there is significant relationship between liquidity and profitability. That means profitability in commercial banks is significantly influenced by liquidity and vice versa.

Table1

Showing Summary of Literature Review

Authors / year	Title	Objectives	Methods	Findings
Maxim /(2023)	The impact of liquidity management on profitability: empirical study on retail companies in Romania.	To measure the impact of liquidity on profitability, represented by the rate of return on capital employed (ROCE) for companies in the retail trade industry in Romania.	To the result of the regression applied to the panel data referring to the analyzed period of 9 years, 2013-2021.	He found that among the independent variables, the current liquidity rate, the cycle liquidity conversion, total assets and dependent variable ROCE, there are significant and negative relationships.
Sany and Yonatan /(2023)	Liquidity and Profitability of Retail Companies: Evidence from Indonesia	To examine effect of liquidity on profitability of publicly listed retail companies on the Indonesian Stock Exchange (IDX).	Data was analyzed with panel data regression using a fixed effect model.	This study shows that liquidity has a positive and significant effect on profitability when measured using the current ratio. In addition, company size has a significant positive effect on profitability. A higher composition of current assets to current liability improves profitability.
Atabaeva, Tashba	What must be the Relation	To examine the liquidity ratio of	The serial correlation Vector Auto	They found that the work showed a negative correlation between

eva, Atabaev and Keles/ (2022)	between Liquidity Ratios and Profitability of the Banks in a Transition Economy? The Case of Kyrgyzstan	the Kyrgyz banking system.	Regression (VAR) model was used for the analysis of time-series data.	liquidity and the economic development. In addition, for Kyrgyzstan, no significant correlation between deposit volume and liquidity ratio was found.
Hasmiana, Madris & Shine Pintor/ (2022)	The Effect of Financial Risk, Capital Structure, Banking Liquidity on Profitability: Operational Efficiency as Intervening Variables in Persero Bank and Private Commercial Banks	To partially analyze the effect of financial risk, capital structure, liquidity, and operational efficiency on, to analyze partially the effect of financial risk, capital structure, and liquidity on profitability through operational efficiency at State-Owned Banks and Private Commercial Banks.	The population of this research is 40 banks. The data source is secondary data in the form of time series data such as financial reports from the Bank Indonesia directory. The data analysis method used classical assumption testing multiple/multiple regression,	They found that Financial risk, capital structure, and liquidity partially had a substantial impact on operational effectiveness, according to the findings. (2) Profitability was significantly impacted by financial risk, capital structure, liquidity, and operational effectiveness. (3) Profitability through operational efficiency is not significantly impacted by financial risk, capital structure, or liquidity.

			coefficient of determination	
Yonas Nigussie Isayas/ (2022)	Determinants of banks' profitability: Empirical evidence from banks in Ethiopia	To investigate the key firms pacific and macroeconomic determinants of profitability of commercial banks in Ethiopia.	They used descriptive methods such as mean, maximum, minimum, standard deviations, and other simple statistical tools.	Asset Tangibility has a positive and significant effect on the profitability of banks. Leverage has a positive and significant effect on the profitability. Capital adequacy ratio (CA) is positively correlated with the return on asset and significant at 1%.
Olaleye, Adesina, & Yusuf/ (2021)	Effect of Liquidity Management on Profitability of Commercial Banks in Nigeria	To examine the effect of liquidity management on profitability of commercial Banks in Nigeria.	They employed the correlational research design and engaged the Johansen test with the vector error correction model	They found that positive effect of liquidity on return on asset and return on equity but a negative effect on net profit margin. .
Paul, Bhowmik, & Famanna /(2021)	Impact of Liquidity on Profitability: A Study on the Commercial Banks in Bangladesh	To investigate the effect of banks' liquidity on its profitability; with the ordinary course of business and in the medium term (10 years)	Analysis tools are descriptive statistic, correlation and regression tools are used.	They found that the impact of liquidity has a significant effect on the profitability in the commercial banking sector of Bangladesh.

| Khati/ (2020) | Impact of Liquidity on Profitability of Nepalese Commercial Banks | To investigate the relationship between the liquidity and the profitability of commercial banks In Nepal. | She use Hausman test and thereafter fixed effects approach, | She found that that assets quality (AQ) has negative and significant relationship with return on Assets (ROA) which means they have inverse relationship. Whereas assets quality (AQ) has positive and significant relationship banks profitability when it is analyzed by banks profitability determinants return on equity (ROE). This indicates that increase in assets quality (AQ) leads to increase in return on equity (ROE). I.e. increase in these liquidity ratios boosts the bank profitability and vice-versa. |
| Abbas, Iqbal & Aziz/ (2019) | The impact of bank capital, bank liquidity and credit risk on profitability in post crisis period: A comparative | To explore the influence of bank capital, bank liquidity level and credit risk on the profitability of commercial banks | Econometric, regression model, robustness | The impact of liquidity on the profitability of the USA large commercial banks is negative and positive on Asian developed economies. Also found that liquidity influences profitability more intensively than capital, |

	study of US and Asia.			whereas the sign of coefficients is similar for large, small and medium-size
Ibrahim /(2017)	The Impacts of Liquidity on Profitability in Banking Sectors of Iraq: A Case of Iraqi Commercial Banks	To examine the impact of liquidity on profitability	To descriptive statistics, correlation and regression analysis, least square (OLS) estimation of data method has been used.	He found that there is no significant relationship between liquidity and Profitability.
Alshatti / (2014)	The Effect of the Liquidity Management on Profitability in the Jordanian Commercial Banks.	To investigate the effect of the liquidity management on profitability in the Jordanian commercial bank.	Descriptive and explanatory Method Secondary data Regression Models	He found that a positive effect of the increase in the quick ratio and the investment ratio of the available funds on the profitability, while there is a negative effect of the capital ratio and the liquid assets ratio on the profitability of the Jordanian commercial banks.
Lukorito, Muturi, Nyang' au, &	Assessing the effect of liquidity on profitability	To determine the effect of internal factors on profitability of commercial banks	Use descriptive and inferential statistics. Internal factor	They found that all the variables Liquidity, has statistically significant and positive

Nyama sege/ (2014).	of commercial banks in Kenya	in Kenya particularly the banks liquidity	was Liquidity, while Profitability was measured using ROA ratios	relationship with banks' profitability
Akter &Mah mud/ (2014)	Liquidity Profitability Relationship in Bangladesh Banking Industry	To explore the relationship between liquidity (measured as current ratio) and profitability (measured as return on assets) in the banking industry in Bangladesh. They have considered twelve banks in four different Sectors.	They used linear regression model is used for empirical investigation and analysis of the relationship between liquidity and profitability.	They found that much fluctuations in profitability in between these times in all the sectors. Finally, we concluded that based on our sample and category, there is no significant relationship between liquidity and profitability in banks of different sectors in Bangladesh.
Adeyan ju, /(2011)	Liquidity Management and Commercial Banks' Profitability in Nigeria	To examine liquidity management and commercial banks' profitability in Nigeria	They use the tested through Pearson correlation data analysis.	They found that there is significant relationship between liquidity and profitability. That means profitability in commercial banks is significantly influenced by liquidity and vice versa.
Lartey, Antwi &	The Relationship between	To find out the relationship between the	The study was descriptive in nature. It	They found that the liquidity and the profitability of the listed

Boadi/(2013)	Liquidity and Profitability of Listed Banks in Ghana	liquidity and the profitability of banks listed on the Ghana Stock Exchange	adopted the longitudinal time dimension, specifically, the panel method.	banks were declining. Again, it was also found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana

2.2.2 Reviews of Previous Thesis

Tharu. (2023) explore and examine the liquidity position, profitability status, impact and relationship between liquidity and profitability of Nepalese commercial banks. The study descriptive and analytical research design has been used. Mostly secondary data have been used from the annual report statements of commercial banks in Nepal. Correlation and regression analysis has used to examine the impact and relationship between liquidity and profitability. They found that the CASH TO CA, CASH TO DP and CR has negative and insignificant relationship and CAR has positive but insignificant relationship with the ROE. Similarly, the CASH TO TDP and CR has shown negative impact and CASH TO CA and CAR has positively with (ROA and ROE) of selected commercial banks over the study period.

Shrestha & Chaurasiya (2023) investigated the Impact of Liquidity Management and Profitability of Joint Venture Commercial Banks in Nepal. Data analysis was done using descriptive statistics, Pearson correlation, regression analysis, and t-test. The data used to analyze five (5) samples size, out of 27 which has found to be covering period 2012-2021 of joint venture commercial Banks in Nepal. The Liquidity management represents the variables of the Credit Deposit Ratio (CDR), Capital adequacy ratio (CAR), Current Reserve ratio (CRR), Total deposit to total ratio (TDTAR), Total loan to total assets ratio (TLTAR) and the profitability including Return on Assets (ROA). The findings of the study have R square value of 0.615 meaning that 61.5% of the variation in the dependent variable is explained by the independent variables while 38.5% is explained by other variables outside the model and also showed that there is a strong positive correlation between the dependent variable and the set of independent variables. The result showed that there is

significant impact of TLTAR on ROA and there is insignificant impact of CDR, CAR, CRR and TDTAR on ROA of joint venture commercial banks in Nepal.

Shrestha & Jha (2020) explored the Impact of Liquidity on Profitability in Foreign Joint Venture Commercial Bank in Nepal: with reference to HBL, EBL & NBB. 3 foreign joint venture commercial banks in Nepal; HBL, EBL and NBB are selected among 27 commercial banks of Nepal as a sample and analyzed for the current study over the period 2014/15 to 2018/19 AD. Analysis was based on data extracted from annual reports and accounts of the banks for the relevant period. Correlation and regression analysis respectively were employed to examine the nature and extent of the relationship between the variables and determine whether any cause and effect relationship between them. Since liquidity management can increase the bank's profitability. The study has examined their liquidity management as well as profitability positions using various statistical and financial tools. The article indicates largely zigzag trend of average profitability of commercial banks, although the trend of liquidity ratios of the bank is unstable. The research concluded that bank's liquidity ratios have below the prescribed standard. The study concluded that the LADR has significant impact in ROA as well as ROE of HBL, EBL and NBB. NRBTDR/CRR has weak significant impact on ROA of all sample banks whereas, it has negative impact ROE of NBB and have the positive impact on other two. CACL has significant effect on ROA of HBL and EBL whereas there is no significant impact on ROA due to CACL in NBB. Further, CACL has significant impact on ROE on all three banks. CHTDR has significant effect on ROA and ROE of HBL and EBL whereas NBB has weak significant impact on both the profitability index.

Budhathoki et al. (2020) examined the impact of liquidity, leverage, and total assets size of the bank on profitability. This study employed bank scope data of all 28 commercial banks operating in Nepal during the period of 2010/11 – 2016/17. Altogether, the 168 observations were used in the study. Three ordinary-least-squares models were applied to analyze the impact of liquidity, leverage, and the total size on the bank's profitability. The first regression model reveals that the higher loan to deposit ratio (low level of liquidity) was observed to have the negative effect on the bank's ROA, ROE, and NIM; however, ROE and NIM were statistically insignificant. The result of the second regression model shows that higher equity to assets ratio (lower leverage) positively affected two profitability measures, ROA and NIM, and was statistically significant—but was negatively related to ROE and statistically insignificant. The result of the final regression model reveals that the

higher bank size appeared favorable to the Nepalese commercial banks and was found to have positive effects on all three profitability measures: ROA, ROE, and NIM.

Shrestha (2018) investigated the relationship between Liquidity management and profitability of commercial banks in Nepal. The objective of the study is to identify the relationship between the Liquidity management and profitability and its impact on profitability. The relation between the Liquidity management and profitability is examined using Pearson correlation analyses. The effects liquidity on profitability is analyzed using the regression analyses. The data has found to be covering period 2012-2016 commercial Banks in Nepal. The Liquidity management represents the variables of the current Reserve ratio (CRR), Credit Deposit Ratio (CDR) and the profitability including return on equity (ROA). The result reveals that liquidity does not have its significant impact on profitability in Nepalese commercial banks.

Pokhrel (2018) conducted thesis entitled, Management of Deposit and Liquidity and Its Impact on Profitability of Joint Venture Finance, i.e. Nabil Bank Limited and Himalaya Bank Limited. The primary goals were to study the utilization of assets and liabilities in joint venture financing in Nepal and to analyze the composition of assets and liabilities of to assess the joint venture finance sector's deposits and loan trends in Nepal. The Principal Findings are: The main conclusions from the study's deposit analysis were that HBL, NABIL, and EBL all performed better than SBI bank in terms of collecting total deposits, which allowed them to profit by mobilizing their deposits in the productive sector. It may also be inferred from the analysis that HBL, NABIL, and EBL performed better than SBI bank in terms of cash and bank balance position relative to total deposits.

Karki (2018) published an article on, "A Study on Liquidity and Loan Portfolio Management of Himalayan Bank Limited And Nepal SBI Bank limited". The examination of the cash and bank balance to current deposit ratio reveals that NIBL has a very good liquidity position and is nearly three times as liquid as HBL and NABIL. HBL and NIBL have a strong capacity to meet the short-term obligations, according to the examination of the liquidity fund to total deposit ratio.

Hustan (2017) published an article on "Liquidity is the Characteristic of an Item that can be Readily Convertible to Cash". Its management is a very topical issue in measuring firm's ability to settle current obligations without any disruption in the daily operations of originations.

Shrestha (2016) Published an article on "The Efficiency of Liquidity Monitoring and Forecasting Framework the Nepal Rastra Bank in the Context of Liquidity Management in the Nepalese Banking and Financial System" has stated liquidity management as the part of risk management framework of financial services industry. He found taking high liquidity risk as well as high credit risk are two main factors that cause Finance to fail. Although high liquidity risk alone is not likely to cause Finance failures, a liquidity crisis usually signals a need for change.

Luitel (2016) conducted a research on "Investment & Liquidity Management of Insurance Companies". The Main Objectives are: To analyze the investment pattern, to analyze Liquidity management of the Insurance companies, Trend of profit of the insurance companies. The main findings are: Most insurance companies are found to invest in government securities and debentures, shares of other companies' securities, banks and finance companies, they avoid real estate and mutual funds, and all insurance companies appear to be risk averse when making their investments.

Walt (2015) Published an article on, "Sound Practices for Managing Liquidity in Banking Organizations" attributed Liquidity, or the ability to fund increases in assets and meet obligations as they come due, is crucial to the ongoing viability of any banking organization. Effective liquidity management can lower the likelihood of major issues. In fact, the significance of liquidity extends beyond the boundaries of a single bank because a lack of liquidity at one institution can have system-wide effects. Because of this, the study of liquidity necessitates that bank management not only continuously assess the bank's liquidity status but also consider how financing requirements are expected to change under various circumstances, including unfavorable ones.

Malla (2015) conducted a research on "Financial Performance of Bank with Special Reference to Himalayan &NABIL Bank Ltd." The main goals are to examine the liquidity management of a sample finance, the status of the finance's deposits and investments, to ascertain how deposits, investments, loans, and advances relate to net profit a trend analysis of deposits, investments, loans, advances, and net profit was also conducted. The major finding is that these financial institutions continue to maintain strong liquidity ratios. According to the evaluation of asset management, NABIL's total obligation to total assets is larger than HBL's.

Dhungana (2014) conducted a research on "Liquidity Position of Commercial Finance in Nepal" of BOK, SCBL, SBI, Manjushree, NIBL and NABIL. To examines the relationship between liquidity and profitability. To assess this Finance's liquidity status. To investigate the connection between interest rates and liquidity. To make improvements for the financial sector's liquidity situation in the future. The ratio of NRB balance to total deposits at SBI bank is higher than that at other Finance. Changes in deposits and changes in the total liquidity of BOK, NABIL, SBI, SCBL, NIB, and Manjushree are positively correlated, although NABIL has a negative correlation coefficient. Total liquid assets and net profit are positively correlated with BOK, NIB, and Manjushree, but negatively with NABIL, SBI, SCBL, and NABIL.

Nagarkoti (2013) Published an article on "Liquidity Risk Management and Self-Paced A/L Management" undoubtedly suggested that the quantity of liquidity you have or can get must be related to the quantity of liquidity that you think you may need. The total of current liabilities you could lose plus newly acquired assets you need to fund represents the amount of liquidity you require. The quantity of liquidity you might require, or liquidity risk, depends heavily on the circumstances.

Table 2

Summary of Nepalese Article and Thesis

Authors/ year	Title	Objectives	Methods	Findings
Tharu / (2023)	Analysis of liquidity and profitability in Nepalese commercial banks	To explore and examine the liquidity position, profitability status, impact and relationship between liquidity and profitability of Nepalese	The study descriptive and analytical research design has been used. Mostly secondary data have been used from the annual report statements of	They found that the CASH TO CA, CASH TO DP and CR has negative and insignificant relationship and CAR has positive but insignificant relationship with the ROE. Similarly, the CASH TO TDP and CR has shown negative

	commercial banks.	commercial banks in Nepal. Correlation and regression analysis has used		impact and CASH TO CA and CAR has positively with (ROA and ROE)
Shrestha & Chaurasiya (2023)	Impact of Liquidity Management on Profitability of Joint Venture Commercial Banks in Nepal	To investigated the Impact of Liquidity Management and Profitability of Joint Venture Commercial Banks in Nepal.	Data analysis was done using descriptive statistics, Pearson correlation, regression analysis, and t-test	The result showed that there is significant impact of TLTAR on ROA and there is insignificant impact of CDR, CAR, CRR and TDTAR on ROA of joint venture commercial banks in Nepal.
Shrestha & Jha /(2020)	Impact of Liquidity on Profitability of Joint Venture Commercial Banks in Nepal	To explored the Impact of Liquidity on Profitability in Foreign Joint Venture Commercial Bank in Nepal: with reference to HBL, EBL & NBB. 3 foreign joint venture commercial banks in Nepal	Correlation and regression analysis respectively were employed	The study concluded that the LADR has significant impact in ROA as well as ROE of HBL, EBL and NBB. NRBTDR/CRR has weak significant impact on ROA of all sample banks whereas, it has negative impact ROE of NBB and have the positive impact on other two. CACL has significant effect on ROA of HBL and EBL whereas there is no

			significant impact on ROA due to CACL in NBB. Further, CACL has significant impact on ROE on all three banks. CHTDR has significant effect on ROA and ROE
Budhathoki et al./ (2020)	The impact of liquidity, leverage, and total size on banks' profitability: evidence from Nepalese commercial banks.	To examine the impact of liquidity, leverage, and total assets size of the bank on profitability.	The first regression model and three ordinary-least-squares models were applied to analyze	The result of the final regression model reveals that the higher bank size appeared favorable to the Nepalese commercial banks and was found to have positive effects on all three profitability measures: ROA, ROE, and NIM.
Shrestha /(2018)	Liquidity management and profitability of commercial banks in Nepal.	To identify the relationship between the Liquidity management and profitability and its impact on profitability	Pearson correlation analyses	The result reveals that liquidity does not have its significant impact on profitability in Nepalese commercial banks.

2.3 Research Gap

This research is related to the liquidity and profitability of a commercial bank in Nepal. Research is done using explanatory research design methods. Data are collected from secondary source; sample size is only five banks. Limited time periods in the research that is only ten years data are taken under studies. Previous researcher did their research using

more than five banks as a sample; most of the research is other sector than banking also. They use five years for the data collection.

After the coming time research may also use only one bank for studies. They may use only one dependent variable or more, Less than or more than four independent variable. They may also use a primary data under studies.

CHAPTER-III

RESEARCH METHODOLOGY

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. In this chapter, researcher presents full roadmaps of research works.

3.1 Research Design

In order to achieve the objectives, descriptive and casual comparative research design has been adopted. The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. Descriptive research design is for the achievement of objectives on related to the current status of the variables. Casual comparative research design for achievement of objective two and three for achievement of objectives two and three related to the relationship and impact independent and dependent variables.

3.2 Population and Sample

Table 3

Population and Sample

S.N.	Commercial Banks	Sample	Owner status
1.	Everest Bank Limited	1	Joint venture With Punjab National Bank Of India
2.	Kumari Bank Limited	1	Private Sector
3.	Nepal Bank Limited	1	Government Sector
	Total	3	

Sampling is done by random sampling. Sample is selected under random basis. Similarly, financial statements of three commercial banks for ten years research period i.e. FY 2012/13 to FY 2021/22 has been taken as sample for the same purpose.

In the fiscal year 2021/22 there is 26 commercial banks in Nepal (2022). Out of 26 commercial banks, three banks are taken under studies. Everest bank limited is the bank

which is joint venture to the Punjab national bank of India, kumara bank is the bank which is private public ownership, and Nepal Bank Limited is the bank which is government.

3.3 Nature and Sources of Data

This study will make use of secondary data. They used the secondary data. Furthermore, utilizing secondary data, the predictive power of such characteristics has been evaluated. The annual reports of the sample companies included in the 10 databases made available on their separate websites served as the source of the data for firm-specific variables. The necessary data for this study will be extracted from the data banks of NEPSE, SEBON, and NRB. For each year from 2012/13 through 2021/22, data about commercial's liquidity and profitability was gathered. In order to examine the relationship between liquidity and profitability, this study will employ panel data.

3.4 Instrument of Data Collection

Instrument refers to the tools that are used in collection of data. Primary data are collected by using different types of instrument, they are; questioners, observations, interviews, laboratory experiment, quasi experiment, scales etc.

Secondary data are collected from the website of the concern banks. In order to collect the data from annual reports published of the banks. NRB (Banking and Financial Statistics), economic report and other published statistical data have been used, and to obtain the additional information, informal talks and procedures have been used. This research has collected the data from annual report of the selected bank.

3.5 Methods of Analysis

For the achievement of the objectives of the study various financial and statistical tools / methods have been used. The analysis of data is done according to the pattern of available data.

3.5.1 Financial Analysis

- Return on Assets
- Return on Equity
- Assets Quality Ratio
- Credit Deposit Ratio
- Cash Deposit Ratio
- Leverage Ratio

Return on assets

Return on assets is the ratio of net profit after tax divided by total assets. The ratio shows the capacity of assets for return. The calculation is done using following formula:

$$\text{Return on assets} = \frac{net\ profit\ after\ tax}{total\ assets}$$

Return on Equity

Return on Equity is calculated net profit after tax dividing by the total equity. This shows the output from the employed from the equity. The formula is about:

$$\text{Return on equity} = \frac{\text{Net Profit after tax}}{\text{Equity Capital}}$$

Assets Quality Ratio

This is the ratio which is calculated by dividing nonperforming loan to total loan and advance. The ratio shows the ratio of nonperforming loan out of total loans and advance. The formula is following:

$$\text{Assets Quality Ratio} = \frac{\text{Non performing loan}}{\text{total loans and advance}}$$

Credit Deposit Ratio

Credit deposit ratio is the ratio of loan and advance divided by total deposit of the companies. The credit deposit ratio is the very importance in the bank because it shows the investment in loan and advance with respect to the total deposit. It calculated as:

$$\text{Credit-Deposit Ratio (\%)} = \frac{Loan\ and\ Advance}{Total\ Deposit}$$

Cash Deposit Ratio

Cash deposit ratio is the ratio of cash and bank balance divided by total deposit. It a ratio which show the part of cash and bank balance which is from deposit. The formula for calculation is following:

$$\text{Cash Deposit Ratio} = \frac{cash\ and\ bank\ balance}{total\ deposit}$$

Leverage Ratio

Leverage is the ratio calculating the dividing by total assets to the equity. Its shows the percent of equity financing for purchase of assets. The following is the formula:

$$\text{Leverage ratio} = \frac{Equity}{Total\ Assets}$$

3.5.2 Statistical Analysis

Descriptive Statistics Analysis

Descriptive statistics on the factors examined in the research are offered in this section. The maximum, minimum, mean, and standard deviation values related to the variables under examination make up the descriptive statistics employed in this study.

Mean ($\overline{X}$)

The arithmetic mean maintains its place in finance, as well. For example, mean earnings estimates typically are an arithmetic mean. The average in this research shows the respondent average about the views related to the question in the questionnaire. The average of strongly disagree and strongly agree is calculated in all the respondent overall that help to make idea about the variable what is it? It is calculated by using the following formula:

$$\text{Mean } (\overline{X}) = \frac{\sum X}{n}$$

Where,

$\sum X$ = Sum of all the variable X

n = Variables

Standard Deviation (σ):

The degree of variance or dispersion in a group of numbers is measured by standard deviation. By calculating the deviation of each data point from the mean, the standard deviation may be determined as the square root of variance. It is denoted by (σ).

$$\text{Standard Deviation S.D} = \sqrt{\frac{\sum (X - \overline{X})^2}{N}}$$

Where,

X = variables

$\overline{X}$ = mean

N = No. of Period

Minimum and Maximum

The minimum is the lowest quarter of the information given. The lowest value of the supplied data that relates to the study variable is another name for it. We start by looking

more closely at the smallest set of data. This number represents the data value in our set of data that is less than or equal to all other values. If we were to arrange all of our information in ascending order, the lowest number on our list would be it. Despite the possibility of repetition in our data set, the smallest number is still a unique integer by definition. The maximum is the highest quarter of the information given. The bigger value of the supplied data that is contained in the pertinent study variable is another name for it. Now we advance to the highest. This number represents the data value in our set of data that is greater than or equal to every other value. If we were to arrange all of our data in ascending order, the highest number would be listed last. The maximum for a certain set of data is a single integer. Although this number may be used more than once, there is only one maximum for a data collection. There can never be two maxima since one of these values would always be larger than the other.

Correlation Analysis

Finding out how strong the links are between various pairs of variables is the major goal of adopting this design. For this goal, correlation analysis has been used. It is a statistical method for figuring out how strongly and in which direction two sets of variables are related. It illustrates the connection between the two variables and how closely they move in tandem. The connection has been explained using the Pearson correlation coefficient. The value of the correlation coefficient ranges from -1 to +1. When two variables move together precisely in the opposite direction and the correlation coefficient is precisely -1, there is a perfect negative correlation. On the other hand, if the correlation coefficient is 1, the variables are considered to be completely positively correlated.

Correlation Coefficient (r) = $\dfrac{n \sum XY - \sum X \sum Y}{\sqrt{[(n \sum x^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)]}}$

Where,

N = number of observations of X and Y

$\sum XY$ = Sum of the product of the observations in series X and Y

$\sum X$ = Sum of the observation in series X

$\sum Y$ = Sum of the observation in series Y

$\sum X^2$ = Sum of the square of the observation in series X

$\sum Y^2$ = Sum of the square of the observations in series Y

Multiple Regression Model

The regression models that will be used in this study's analysis aim to examine the link between explanatory variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage that influence profitability. The following form will be used to express the relationship between the dependent and independent variables:

Model

$ROA = \beta_0 + \beta_1 \times NLTL + \beta_2 \times LATD + \beta_3 \times CBTD + \beta_4 \times ETA + e$

$ROE = \beta_0 + \beta_1 \times NLTL + \beta_2 \times LATD + \beta_3 \times CBTD + \beta_4 \times ETA + e$

Where,

ROE= Return on Equity

ROA= Return on Assets

NLTL= Non Performing Loan to Total Assets

ETA= Equity to Total Assets

LATD= Loan and Advance to Total Deposit

CBTD= Cash and Bank balance to Total Deposit

3.6 Variable Specification

For the convenient presentation of the research, the variables are abbreviated as follows. This can be shown in the following table.

Table 4

Variables, Measure and Abbreviations

Variables	Measure	Abbreviations
1. Return on assets	Profit after taxation/Total assets	ROA
2. Return On Equity	Profit after tax/ Equity	ROE
3. Assets Quality	Nonperforming loan/ Total Loan and advance	NPLTA
4. Credit Deposit Ratio	Loan and advance/ Total deposits	LATD
5. Cash deposit ratio	Cash and Bank Balance / Total Deposit	CBTD
6. Leverage	Equity/ Total Assets	ETA

3.7 Conceptual Framework
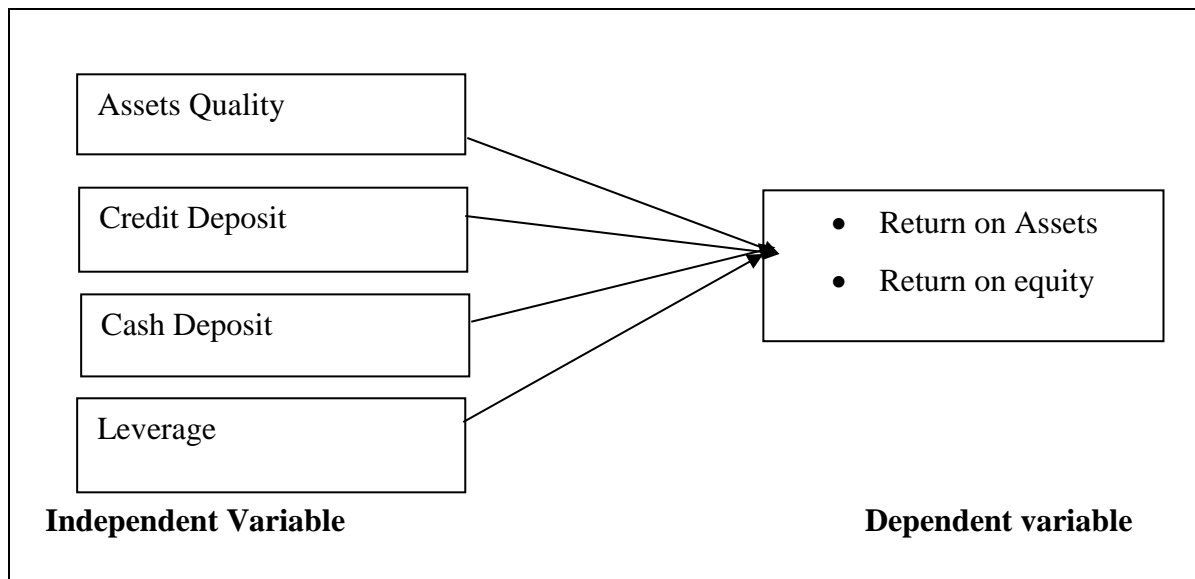
Source: *Khati (2020)*

Figure 1 Conceptual Framework

3.8 Definition of the Variables

Assets Quality

The assets quality (A) indicator shows how much credit risk is currently present in the loan and investment portfolio. It addresses the loan's quality, which shows the institutions' profits. When evaluating an asset's quality, one must rank the potential investment risks that the company may experience and contrast them with capital gains. A rising trend in the percentage of non-performing loans to total loans denotes a decline in the credit portfolio quality, which has an impact on the cash flow and net income of financial institutions. Especially if impaired loans have not yet been categorized as non-performing, it is frequently beneficial to complement with data on non-performing loans net of provisions and on the ratio of provision plus internet suspension on impaired loans to total loans (Kolb & Rodrigeuz, 1996).

Profitability

The capacity of a bank to generate enough revenue or to reduce operating costs, meaning being more effective, is what determines its profitability. The firm's returns on asset (ROA), return on equity (ROE), and net interest margin (NIM) ratios are used to quantify it. These ratios summarize a significant amount of financial data and allow for the qualitative assessment of the firm's profitability (Velnampy & Niresh, 2012). The ratio of income to total assets is called the ROA. It shows how well a company's management uses all of the resources available to it to produce net income (Khrawish, 2011). The profitability of banks

depends on both internal and external variables. External factors include both industry-specific and macroeconomic issues, whereas internal ones are bank-specific (Al-Tamimi, 2010). Internal factors fall under the purview of the bank and are impacted by internal choices made by the management and board. They vary from one bank to the next. These factors include labor productivity, the state of information technology, capital size, deposit liabilities size, credit portfolio size and composition, interest rate policy, risk level, management caliber, bank size, ownership, and similar factors (Ongore & Kusa, 2013).

Leverage

Leverage is a tool used in financial analysis to quantify risk. Leverage displays the company's financial, operational, and investment-related risk. A leverage ratio is one of many financial metrics that examines the amount of capital that is borrowed (in the form of loans) and evaluates a company's capacity to pay its debts. Because businesses typically employ a combination of debt and equity to fund their operations, the leverage ratio category is crucial. Knowing how much debt a company has can help determine if it will be able to pay off its loans when they are due (https://www.investopedia.com).

Credit Deposit Ratio

Credit-Deposit The ratio represents the portion of loan assets that a bank generates from deposits received. Credits are the name for bank advances and loans. In other words, it refers to the amount that a bank subsequently recovers from a person or a company that it lent money to. The borrower is charged interest. Deposit is the amount that a bank accepts from depositors in exchange for interest (Singh & Tandon, 2012).

$$\text{Credit-Deposit Ratio (\%)} = \frac{Loan\ and\ Advance}{Total\ Deposit}$$

Cash Deposit Ratio

The cash-to-deposit ratio measures how much a bank lends in relation to the deposits it has mobilized. It reveals how much of a bank's core finances are going toward lending, which is the primary banking activity (Goel & Kumar, 2016). It is calculated as:

$$\text{Cash Deposit Ratio} = \frac{cash\ and\ bank\ balance}{total\ deposit}$$

CHAPTER-IV

RESULT AND DISCUSSION

This chapter is the analysis of the research. Here result included the detail calculation of the result with various hypothesis testing and calculation of result for meeting the objectives of the research. The discussion included the objectives based finding with comparative for the previous researcher.

4.1 Result

4.1.1 Descriptive Statistics Analysis

Descriptive statistics on the factors examined in the research are offered in this section. The maximum, minimum, mean, and standard deviation values related to the variables under examination make up the descriptive statistics employed in this study.

Table 5

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Return on assets	30	.55	3.73	1.5115	.727
Return On Equity	30	6.71	42.93	15.7918	8.194
Assets Quality	30	.12	4.11	1.8135	1.21
Credit Deposit Ratio	30	55.96	104.75	81.2467	13.28
Cash deposit ratio	30	3.26	30.23	11.0465	6.71
Leverage	30	3.80	27.08	10.6016	4.83
Valid N (list wise)	30				

Source: *Appendix*

Table 5 shows the descriptive statistics of the research. The descriptive statistics of the independent variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage. Dependent variables are return on assets and return on equity. Total of three commercial bank are taken as a sample and each bank has 10 observation in total 30 observation are used in this research. The minimum, maximum, mean and standard deviation are calculated. The return on assets minimum, maximum, mean and standard deviation are 0.55, 3.73, 1.51 and 0.727 respectively. The Return on Equity minimum, maximum, mean and standard deviation are 6.71, 42.93, 15.79 and 8.19 respectively. The

Assets Quality minimum, maximum, mean and standard deviation are 0.12, 4.11 1.81 and 1.21 respectively. The Credit Deposit Ratio minimum, maximum, mean and standard deviation are 55.96, 104.75, 81.24 and 13.28 respectively. The Cash deposit ratio minimum, maximum, mean and standard deviation are 3.26, 30.23, 11.046 and 6.71 respectively. The Leverage ratio minimum, maximum, mean and standard deviation are 3.80, 27.08, 10.60 and 4.83 respectively. The result explain that the variables of the research are fluctuating nature because the value of the minimum is very low and maximum is very high and the different between minimum with mean and maximum with mean is very high. The standard deviation of the series of data is very high, the high standard deviation represent the fluctuation of the data is high. The current status of the research variables on the given background is fluctuating nature.

4.1.2 Correlation Analysis

Correlation analysis has been used. It is a statistical method for figuring out how strongly and in which direction two sets of variables are related. It illustrates the connection between the two variables and how closely they move in tandem. The connection has been explained using the Pearson correlation coefficient. The value of the correlation coefficient ranges from -1 to +1. When two variables move together precisely in the opposite direction and the correlation coefficient is precisely -1, there is a perfect negative correlation.

Table 6

Correlation of Variables

		Return on assets	Return On Equity	Assets Quality	Credit Deposit Ratio	Cash deposit ratio	Leverage
Return on assets	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	30					
Return On Equity	Pearson Correlation	.548**	1				
	Sig. (2-tailed)	.002					
	N	30	30				
Assets Quality	Pearson Correlation	.004	-.020	1			
	Sig. (2-tailed)	.984	.915				
	N	30	30	30			
Credit Deposit Ratio	Pearson Correlation	.014	-.459*	-.447*	1		
	Sig. (2-tailed)	.942	.011	.013			
	N	30	30	30	30		
Cash deposit ratio	Pearson Correlation	.079	.514**	-.322	-.319	1	
	Sig. (2-tailed)	.679	.004	.082	.086		
	N	30	30	30	30	30	
Leverage	Pearson Correlation	.482**	-.425*	.129	.430*	-.471**	1
	Sig. (2-tailed)	.007	.019	.497	.018	.009	
	N	30	30	30	30	30	30

Source: *Appendix*

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

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

Table 6 shows the correlation analysis of the independent variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage. Dependent variables are return on assets and return on equity. Total of three commercial bank are taken as a sample and each bank has 10 observation in total 30 observation are used in this research.

The relationship between return on assets and return equity is positive and significant. The correlation value positive 0.548 shows the moderate positive relationship and it is significant because the significant value is 0.002 which is less than 0.05 so the relationship is called 1 percent level of significant. The hypothesis is not true.

The relationship between return on assets and Assets Quality is positive and but not significant. The correlation value positive 0.004 shows the low positive relationship and it is not significant because the significant value is 0.984 which is more than 0.05 so the relationship is insignificant. The hypothesis is not true.

The relationship between return on assets and Credit Deposit Ratio is positive and but not significant. The correlation value positive 0.014 shows the low positive relationship and it is not significant because the significant value is 0.984 which is more than 0.05 so the relationship is insignificant. The hypothesis is not true.

The relationship between return on assets and Cash deposit ratio is positive and but not significant. The correlation value positive 0.079 shows the low positive relationship and it is not significant because the significant value is 0.679 which is more than 0.05 so the relationship is insignificant. The hypothesis is not true.

The relationship between return on assets and Leverage ratio is positive and significant. The correlation value positive 0.482 shows the low positive relationship and it is not significant because the significant value is 0.007 which is less than 0.05 so the relationship is 1 percent level of significant. The hypothesis is true.

The relationship between return on equity and Assets Quality is negative and but not significant. The correlation value negative 0.02 shows the low negative relationship and it is not significant because the significant value is 0.915 which is more than 0.05 so the relationship is insignificant. The hypothesis is not true.

The relationship between return on equity and Credit Deposit Ratio is negative and significant. The correlation value is negative 0.459 shows the low negative relationship and it is significant because the significant value is 0.011 which is less than 0.05 so the relationship is 5 percent level of significant. The hypothesis is true.

The relationship between return on equity and Cash deposit ratio is positive and significant. The correlation value positive 0.514 shows the moderate positive relationship and it is significant because the significant value is 0.004 which is less than 0.05 so the relationship is 1 percent level of significant. The hypothesis is true.

The relationship between return on equity and Leverage ratio is negative and significant. The correlation value negative 0.425 shows the low negative relationship and it is significant because the significant value is 0.019 which is more than 0.05 so the relationship is 5 percent level of significant. The hypothesis is true.

4.1.3 Multiple Regression Analysis

The regression models that will be used in this study's analysis aim to examine the link between explanatory variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage that influence profitability. The objective three related to the impact of the independent to the dependent variables is calculated using the model of the research. The model of the research is two type. The model related to the based on return on equity and return on assets.

Regression Based on Return on Asset

The research is based on the dependent variables return on asset and independent variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage. The model show the impact of Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage to the return on assets.

Table 7

Model Summary Based on ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621ᵃ	.386	.287	.614

Source: *Appendix*

a. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Table 7 shows the model summary of the 30 observation of different three bank and each bank has ten observation. The independent Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio. Dependent variables of the research is return on assets. The R square value is 0.386 and it represent that the cumulatively the independent variable impacted to

the dependent variable return on assets by 38.6% and remaining 61.4% impacted other variable.

Table 8

ANOVA Based on ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.923	4	1.481	3.925	.013[b]
	Residual	9.431	25	.377		
	Total	15.355	29			

Source: *Appendix*

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Table 8 shows the ANOVA of the research based on model one. The research has Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio are independent variables. The dependent variable is return on assets. The regression value is significant because which is less than 0.05, i.e. 0.013.

Table 9

Coefficient Based on ROA

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.180	1.248		.946	.353
	Assets Quality	-.063	.129	-.106	-.490	.628
	Credit Deposit Ratio	-.014	.013	-.257	-1.123	.272
	Cash deposit ratio	.035	.022	.319	1.571	.129
	Leverage	.114	.029	.756	3.895	.001

Source: *Appendix*

a. Dependent Variable: Return on Assets

Table 9 shows the coefficient of the research. The research has Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio are independent variables. The dependent variable is return on assets. The sample of the 30 observation of different three bank and each bank has ten observation.

The Assets Quality has negative impact to the return on assets and which is not significantly impacted. The beta value is negative 0.063 which represent the 1% change in Assets Quality than negative 0.063% change in return on assets and value calculate high accuracy because the standard error is 0.129 which is less. The significant value is more than 0.05 i.e. 0.628 so the impact is insignificant. The hypothesis is not true.

The Credit Deposit Ratio has negative impact to the return on assets and which is not significantly impacted. The beta value is negative 0.014 which represent the 1% change in Credit Deposit Ratio than negative 0.014% change in return on assets and value calculate high accuracy because the standard error is 0.013 which is less. The significant value is more than 0.05 i.e. 0.272 so the impact is insignificant. The hypothesis is not true.

The Cash deposit ratio has positive impact to the return on assets and which is not significantly impacted. The beta value is positive 0.035 which represent the 1% change in Cash deposit ratio than positive 0.035% change in return on assets and value calculate high accuracy because the standard error is 0.022 which is less. The significant value is more than 0.05 i.e. 0.129 so the impact is insignificant. The hypothesis is not true.

The Leverage ratio has positive impact to the return on assets and which is significantly impacted. The beta value is positive 0.114 which represent the 1% change in Leverage ratio than positive 0.114% change in return on assets and value calculate high accuracy because the standard error is 0.029 which is less. The significant value is more less 0.05 i.e. 0.001 so the impact is significant. The hypothesis is true.

Regression Based on Return on Equity

The research is based on the dependent variables return on Equity and independent variables Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage. The model show the impact of Assets Quality, Credit Deposit Ratio, Cash deposit ratio and Leverage to the return on Equity.

Table 10

Model Summary Based on ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.611[a]	.374	.273	6.98598

Source: *Appendix*

a. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Table 10 shows the model summary of the 30 observation of different three bank and each bank has ten observation. The independent Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio. Dependent variables of the research is return on equity. The R square value is 0.374 and it represent that the cumulatively the independent variable impacted to the dependent variable return on equity by 37.4% and remaining 62.6% impacted other variable.

Table 11

ANOVA Based on ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	727.420	4	181.855	3.726	.016[b]
	Residual	1220.097	25	48.804		
	Total	1947.517	29			

Source: *Appendix*

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Table 11 shows the ANOVA of the research based on model one. The research has Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio are independent variables. The dependent variable is return on equity. The regression value is significant because which is less than 0.05, i.e. 0.016.

Table 12

Coefficient Based on ROE

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
2	(Constant)	29.152	14.197		2.053	.051
	Assets Quality	-.201	1.469	-.030	-.137	.892
	Credit Deposit Ratio	-.190	.142	-.308	-1.332	.195
	Cash deposit ratio	.423	.250	.347	1.693	.103
	Leverage	-.213	.333	-.126	-.641	.528

Source: *Appendix*

a. Dependent Variable: Return on Equity

Table 12 shows the coefficient of the research. The research has Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio are independent variables. The dependent variable is return on equity. The sample of the 30 observation of different three bank and each bank has ten observation.

The Assets Quality has negative impact to the return on equity and which is not significantly impacted. The beta value is negative 0.201 which represent the 1% change in Assets Quality than negative 0.0201% change in return on equity and value calculate high accuracy because the standard error is 0.1.469 which is less. The significant value is more than 0.05 i.e. 0.892 so the impact is insignificant. The hypothesis is not true.

The Credit Deposit Ratio has negative impact to the return on equity and which is not significantly impacted. The beta value is negative 0.19 which represent the 1% change in Credit Deposit Ratio than negative 0.19% change in return on equity and value calculate high accuracy because the standard error is 0.142 which is less. The significant value is more than 0.05 i.e. 0.195 so the impact is insignificant. The hypothesis is not true.

The Cash deposit ratio has positive impact to the return on equity and which is not significantly impacted. The beta value is positive 0.423 which represent the 1% change in Cash deposit ratio than positive 0.423% change in return on equity and value calculate high accuracy because the standard error is 0.25 which is less. The significant value is more than 0.05 i.e. 0.103 so the impact is insignificant. The hypothesis is not true.

The Leverage ratio has negative impact to the return on equity and which is not significantly impacted. The beta value is negative 0.213 which represent the 1% change in Leverage ratio than negative 0.213% change in return on equity and value calculate high accuracy because the standard error is 0.333 which is less. The significant value is more 0.05 i.e. 0.528 so the impact is insignificant. The hypothesis is not true.

4.2 Discussion

The first objective of research is to examine the current position of the liquidity and profitability of a commercial bank in Nepal. It is found that the variables of the research are fluctuating nature because the value of the minimum is very low and maximum is very high and the different between minimum with mean and maximum with mean is very high. The result is consitance with the result of (Shrestha & Chaurasiya, 2023). The standard deviation of the series of data is very high, the high standard deviation represent the

fluctuation of the data is high. The result is consistence with the result of (Shrestha, 2018). The current status of the research variables on the given background is fluctuating nature. The result is consistence with the result of (Pokhrel, 2018).

The second objective of research is to analyze the relationship between liquidity and profitability of a commercial bank in Nepal. It is found that the relationship between return on assets and return equity is positive and significant. The hypothesis is not true. The relationship between return on assets and Assets Quality is positive and but not significant. The result is consistence with the result of (Shrestha & Jha, 2020). The hypothesis is not true. The relationship between return on assets and Credit Deposit Ratio is positive and but not significant. The hypothesis is not true. The result is consistence with the result of (Paul et al., 2020). The relationship between return on assets and Cash deposit ratio is positive and but not significant. The hypothesis is not true. The relationship between return on assets and Leverage ratio is positive and significant. The hypothesis is true. The relationship between return on equity and Assets Quality is negative and but not significant. The hypothesis is not true. The result is consistence with the result of (Khati, 2020). The relationship between return on equity and Credit Deposit Ratio is negative and significant. The hypothesis is true. The result is consistence with the result of (Hasmiana et al., 2022). The relationship between return on equity and Cash deposit ratio is positive and significant. The hypothesis is true. The relationship between return on equity and Leverage ratio is negative and significant. The hypothesis is true. The result is consistence with the result of (Atabaeva et al., 2022).

The third objective of research is to examine the any impact of the liquidity toward profitability of a commercial bank in Nepal. It is found that the Assets Quality has negative impact to the return on assets and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Atabaeva et al., 2022). The Credit Deposit Ratio has negative impact to the return on assets and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Sany &Yonatan, 2023). The Cash deposit ratio has positive impact to the return on assets and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Hasmiana et al., 2022). The result is consistence with the result of (Maxim, 2023). The Leverage ratio has positive impact to the return on assets and which is significantly impacted. The hypothesis is true. The Assets Quality has negative impact to

the return on equity and which is not significantly impacted. The hypothesis is not true. The Credit Deposit Ratio has negative impact to the return on equity and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Shrestha & Jha, 2020). The Cash deposit ratio has positive impact to the return on equity and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Olaleye et al., 2021).The Leverage ratio has negative impact to the return on equity and which is not significantly impacted. The hypothesis is not true. The result is consistence with the result of (Tharu, 2023).

CHAPTER-IV

SUMMARY AND CONCLUSION

The chapter five is the summary, conclusion and implication carries chapter. The summary included the detail of the given research from beginning to ending of the research. The conclusion included the detail about the finding and in overall conclusion with objective basis.

5.1 Summary

The management of liquidity is an important aspect of corporate operations. The firm should have the necessary level of liquidity for the very survival of the business. It shouldn't be too much or not enough. The accumulation of ideal money is a sign of excessive liquidity. Potential investors give the profitability ratios more thought since they are concerned about the bank dividend and the rise in stock price. Because low profit margins would deter investors from making investments, managers are interested in gauging operating performance in terms of profitability so that effective management can be put in place to inspire confidence in potential investors and ensure the success and survival of the banking industry. At the moment, Nepal's national and financial systems are both experiencing liquidity issues. A variety of sectors were impacted by the liquidity issue. The present issue with time liquidity makes this research pertinent at this point. The bank has closed the entire loan due to the financial crisis. On the given background conducted the research on "impact of liquidity on profitability of Nepalese commercial banks".

The objectives of research are to examine the current position of the liquidity and profitability of a commercial bank in Nepal, to analyze the relationship between liquidity and profitability of a commercial bank in Nepal and to examine the any impact of the liquidity toward profitability of a commercial bank in Nepal. The objectives are maintain because of the problem of research are what is the current position of the liquidity and profitability of a commercial bank in Nepal? What is the relationship between liquidity and profitability of a commercial bank in Nepal? Is there any impact of the liquidity toward profitability of a commercial bank in Nepal? The conceptual framework of the research is prepare based on the objectives and research problem to achieve them with independent variables are assets quality ratio, credit deposit ratio, cash deposit ratio and leverage ratio. The dependent variables are return on asset and return on equity. Descriptive research

design is for the achievement of objectives on related to the current status of the variables. Casual comparative research design for achievement of objective two and three for achievement of objectives two and three related to the relationship and impact independent and dependent variables is used. All the commercial bank in Nepal are the population of the research and 3 commercial bank are the selected using judgmental sampling because of the one is joint venture bank, one is private bank and one is government bank selected under studies. Data are secondary nature and collected from the annual report of the concern bank. Financial and statistical analysis is done for the achievement of the objectives. The finding of the studies are the current status of the variables of the research are fluctuating nature because the value of the minimum is very low and maximum is very high and the different between minimum with mean and maximum with mean is very high. The standard deviation of the series of data is very high, the high standard deviation represent the fluctuation of the data is high. The relationship between assets quality, credit deposit and cash deposit with return on assets is positive but not significant. Leverage and return on assets relationship is positive and significant. Assets quality and return on equity relationship is negative with not significant. Credit deposit and leverage has negative and significant relation to the return on equity. Cash deposit and return on equity relationship is positive and significant. The impact of assets quality and credit deposit to the return on assets is negative but not significant. Cash deposit positive impact to the return on assets but not significant. Leverage has positive impact with significant to the return on assets. Assets Quality, Credit Deposit Ratio and Leverage has negative and not significant impact to the return on assets. Cash deposit ratio has positive and but not significant impact to the return on equity.

5.2 Conclusion

The first objective of research is to examine the current position of the liquidity and profitability of a commercial bank in Nepal. It is found that the current status of the variables of the research are fluctuating nature because the value of the minimum is very low and maximum is very high and the different between minimum with mean and maximum with mean is very high. The standard deviation of the series of data is very high, the high standard deviation represent the fluctuation of the data is high. In conclusion the current status of the liquidity and profitability is fluctuating in nature.

The second objective of research is to analyze the relationship between liquidity and profitability of a commercial bank in Nepal. It is found that the relationship between assets quality, credit deposit and cash deposit with return on assets is positive but not significant. Leverage and return on assets relationship is positive and significant. Assets quality and return on equity relationship is negative with not significant. Credit deposit and leverage has negative and significant relation to the return on equity. Cash deposit and return on equity relationship is positive and significant. In concussion relationship between the liquidity and profitability is negative but significant.

The third objective of research is to examine the any impact of the liquidity toward profitability of a commercial bank in Nepal. It is found that the impact of assets quality and credit deposit to the return on assets is negative but not significant. Cash deposit positive impact to the return on assets but not significant. Leverage has positive impact with significant to the return on assets. Assets Quality, Credit Deposit Ratio and Leverage has negative and not significant impact to the return on assets. Cash deposit ratio has positive and but not significant impact to the return on equity. In conclusion the impact of liquidity to the profitability is negative but not significant.

5.3 Implications

Liquidity is the basic Fonda of the organization for servable in day to day business activities. Currently Nepal is facing the problem of liquidity in the banking and national level. Problem of liquidity made a various sector affects. This research is appropriate for this time because of the current time liquidity problem. The entire loan is closed by the bank because of financial crisis. It's because of the liquidity problem of the banks. This research is rational because of the improvement of the profit of the organization. Profit is the main aim of the each company. The making profit is the main feature   profit making company. Banks are the profit making nature of company. Liquidity factor is the main factor of company success. The implication of the current research is specified on the following.

1. This research is helpful the government, banking authorities for solving the current liquidity related problem in long run.
2. This research is helpful to the banking industries for solving the industries liquidity related policies maintenance.

3. This research is helpful to the individual bank to make a profit by solving the adequate liquidity in the bank.

4. This research is helpful to the researcher to make a reference to their research in future.

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APPENDIXES

Appendices 1: Data from Annual Report of Selected Bank

Nepal Bank Limited

Rs, Million

Year	Net Profit	Total Assets	Equity	Non-performing loan	Loan and Advance	Total Deposit	Cash and Bank Balance
2022	3856	260077	35463	4356	177639	196076	6391
2021	4572	122645	33215	4572	141958	162813	6528
2020	2332	191162	30030	2332	106824	141530	4971
2019	2596	171515	29281	2596	95724	117200	10418
2018	3215	133467	22971	3215	78295	99540	5780
2017	1747	130226	23074	1747	73185	93708	5489
2016	2882	103479	6713	1978	61250	89410	14388
2015	483	88211	3831	1226	50970	77998	8004
2014	716	77980	3348	1265	39035	69337	5555
2013	533	66853	2543	1453	35621	63650	4865

Kumari Bank Limited

Rs, Million

Year	Net Profit	Total Assets	Equity	Non-performing loan	Loan and Advance	Total Deposit	Cash and Bank Balance
2022	2579	212108	21002	1763	157408	176767	17609
2021	1970	189,782	18,892	1380	143020	145838	7,580
2020	1158	153341	17,268	1600	114513	116547	9,154
2019	1230	105311	11,719	770	76051	73201	8821
2018	1046	82723	10,539	660	62374	59546	3780
2017	660	61416	8,263	840	44697	47691	4734
2016	716	42738	4,159	345	29853	31793	3627
2015	394	37374	2,785	673	26246	33421	4990
2014	341	36452	2,653	918	24500	34025	4506
2013	291	35629	2,589	776	24123	33203	4469

Everest bank Limited

Rs, Million

Year	Net Profit	Total Assets	Equity	Non-performing loan	Loan and Advance	Total Deposit	Cash and Bank Balance
2022	2479	225381	22794	183	155053	172739	14024
2021	1958	212336	20,683	786	141958	141,530	9163
2020	2332	191,162	18,637	1254	106824	162,813	10368
2019	4347	170077	17,625	1123	112006	129568	7759
2018	3682	144818	16,134	456	94181	115511	10065
2017	2006	116510	11,543	197	77285	95094	21383
2016	1730	113885	8,513	264	67955	93735	23117
2015	1574	99152	6,889	367	54482	83093	25116
2014	1549	70445	5,456	470	47572	62108	13172
2013	1471	65741	4,827	276	43393	57720	11212

Appendix 2: Analysis of Data

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Return on assets	30	.55	3.73	1.5115	.72765
Return On Equity	30	6.71	42.93	15.7918	8.19486
Assets Quality	30	.12	4.11	1.8135	1.21570
Credit Deposit Ratio	30	55.96	104.75	81.2467	13.28512
Cash deposit ratio	30	3.26	30.23	11.0465	6.71738
Leverage	30	3.80	27.08	10.6016	4.83102
Valid N (listwise)	30				

Correlations

		Return on assets	Return On Equity	Assets Quality	Credit Deposit Ratio	Cash deposit ratio	Leverage
Return on assets	Pearson Correlation	1	.548**	.004	.014	.079	.482**
	Sig. (2-tailed)		.002	.984	.942	.679	.007
	N	30	30	30	30	30	30
Return On Equity	Pearson Correlation	.548**	1	-.020	-.459*	.514**	-.425*
	Sig. (2-tailed)	.002		.915	.011	.004	.019
	N	30	30	30	30	30	30
Assets Quality	Pearson Correlation	.004	-.020	1	-.447*	-.322	.129
	Sig. (2-tailed)	.984	.915		.013	.082	.497
	N	30	30	30	30	30	30
Credit Deposit Ratio	Pearson Correlation	.014	-.459*	-.447*	1	-.319	.430*
	Sig. (2-tailed)	.942	.011	.013		.086	.018
	N	30	30	30	30	30	30
Cash deposit ratio	Pearson Correlation	.079	.514**	-.322	-.319	1	-.471**
	Sig. (2-tailed)	.679	.004	.082	.086		.009
	N	30	30	30	30	30	30
Leverage	Pearson Correlation	.482**	-.425*	.129	.430*	-.471**	1
	Sig. (2-tailed)	.007	.019	.497	.018	.009	
	N	30	30	30	30	30	30

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

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621[a]	.386	.287	.61421

a. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.923	4	1.481	3.925	.013[b]
	Residual	9.431	25	.377		
	Total	15.355	29			

a. Dependent Variable: Return on assets
b. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.180	1.248		.946	.353
	Assets Quality	-.063	.129	-.106	-.490	.628
	Credit Deposit Ratio	-.014	.013	-.257	-1.123	.272
	Cash deposit ratio	.035	.022	.319	1.571	.129
	Leverage	.114	.029	.756	3.895	.001

a. Dependent Variable: Return on assets

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.611[a]	.374	.273	6.98598

a. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	727.420	4	181.855	3.726	.016[b]
	Residual	1220.097	25	48.804		
	Total	1947.517	29			

a. Dependent Variable: Return On Equity

b. Predictors: (Constant), Leverage, Assets Quality, Cash deposit ratio, Credit Deposit Ratio

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	29.152	14.197		2.053	.051
	Assets Quality	-.201	1.469	-.030	-.137	.892
	Credit Deposit Ratio	-.190	.142	-.308	-1.332	.195
	Cash deposit ratio	.423	.250	.347	1.693	.103
	Leverage	-.213	.333	-.126	-.641	.528

a. Dependent Variable: Return On Equity

	ROA		
YEAR	EBL	KBL	NBL
2022	1.1	1.22	1.48
2021	0.92	1.04	3.73
2020	1.22	0.76	1.22
2019	2.56	1.17	1.51
2018	2.54	1.26	2.41
2017	1.72	1.07	1.34
2016	1.52	1.68	2.79
2015	1.59	1.05	0.55
2014	2.2	0.94	0.92
2013	2.24	0.82	0.8

	ROE		
YEAR	EBL	KBL	NBL
2022	10.88	12.28	10.87
2021	9.47	10.43	13.76
2020	12.51	6.71	7.77
2019	24.66	10.5	8.87
2018	22.82	9.93	14
2017	17.38	7.99	7.57
2016	20.32	17.22	42.93
2015	22.85	14.15	12.61
2014	28.39	12.85	21.39
2013	30.47	11.24	20.96

	NPLTL		
YEAR	EBL	KBL	NBL
2022	0.12	1.12	2.45
2021	0.55	0.96	3.22
2020	1.17	1.4	2.18
2019	1	1.01	2.71
2018	0.48	1.06	4.11
2017	0.25	1.88	2.39
2016	0.39	1.16	3.23
2015	0.67	2.56	2.41
2014	0.99	3.75	3.24
2013	0.64	3.22	4.08

	LATD		
YEAR	EBL	KBL	NBL
2022	89.76	89.05	90.6
2021	100.3	98.07	87.19
2020	65.61	98.25	75.48
2019	86.45	103.89	81.68
2018	81.53	104.75	78.66
2017	81.27	93.72	78.1
2016	72.5	93.9	68.5
2015	65.57	78.53	65.35
2014	76.6	72.01	56.3
2013	75.18	72.65	55.96

	CBTD		
YEAR	EBL	KBL	NBL
2022	8.12	9.96	3.26
2021	6.47	5.2	4.01
2020	6.37	7.85	3.51
2019	5.99	12.05	8.89
2018	8.71	6.35	5.81
2017	22.49	9.93	5.86
2016	24.66	11.41	16.09
2015	30.23	14.93	10.26
2014	21.21	13.24	8.01
2013	19.42	13.46	7.64

	ETA		
YEAR	EBL	KBL	NBL
2022	10.11	9.9	13.64
2021	9.74	9.95	27.08
2020	9.75	11.26	15.71
2019	10.36	11.13	17.07
2018	11.14	12.74	17.21
2017	9.91	13.45	17.72
2016	7.48	9.73	6.49
2015	6.95	7.45	4.34
2014	7.75	7.28	4.29
2013	7.34	7.27	3.8