Effects of Liquidity on Profitability of Commercial Banks in Nepal

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Abstract

Bank liquidity refers to the ability of the bank to ensure the availability of funds to meet financial commitments or maturing obligations at a reasonable price at all times. The liquidity of the banking sector has historically faced challenges stemming from a variety of factors. Nepal's financial system is characterized by a dominance of commercial banks, limited diversification of financial instruments, and a relatively low level of financial inclusion. This study examines the effect of liquidity on the performance of Nepalese commercial banks. The descriptive, correlational & multiple regression model has been used for analysis of the data. The sample banks are selected using the purposive sampling approach with 50 observations for the period of 2012/13 to 2021/22. Out of the total population, five leading private commercial banks were selected based on their paid-up capital which comprised 25.00 percent of the total population of commercial banks in Nepal. The pooled data of five commercial banks (Nabil Bank Limited, Himalayan Bank Limited, Everest Bank Limited, Nepal Investment Mega Bank Limited and Nepal SBI Bank Limited) out of total population of twenty commercial banks up to November 2024 has been analyzed. For this study, the descriptive and causal comparative research designs have been used. The study uses independent variables such as Liquid Fund to Current Liabilities Ratio (LFTCLR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Cash in hand to Total Deposit Ratio (CHTDR) & Cash and Bank Balance to Total Deposit Ratio (CABTDR) and dependent variables (return on equity and return on assets).

The results showed that specific financial indicators, such (Liquid Fund to Current Liabilities Ratio (LFTCLR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Cash in hand to Total Deposit Ratio (CHTDR) & Cash and Bank Balance to Total Deposit Ratio (CABTDR); play crucial roles in influencing ROA and ROE. Major issue on liquidity are highlighted. Identified that, liquidity significantly impact bank profitability, as evidenced by their bivariate correlation with returns on assets (ROA) and returns on equity (ROE). The analysis revealed that the Liquid Fund to Total Deposit Ratio (LFTDR),NRB Balance to Total Deposit Ratio (NRBTDR), and Cash in hand to Total Deposit Ratio (CHTDR) significantly contribute to predicting ROA. A positive association was observed for LFTDR, indicating that an increase in the ratio of liquid funds to total deposits corresponds to a higher predicted ROA. Similarly, NRBTDR demonstrated a positive impact, signifying that a greater reliance on non-resident balances relative to total deposits is associated with an elevated predicted ROA. In contrast, CHTDR displayed a negative relationship, suggesting that an increase in the ratio of cash in hand to total deposits is linked to a decrease in the predicted ROA. Conversely, the ratios of Liquid Fund to Current Liabilities (LFTCLR) and Cash and Bank Balance to Total Deposit (CABTDR) did not exhibit statistically significant relationships with ROA, implying their limited role in explaining variability in the financial performance of the sample banks. Moreover, the analysis highlights the interconnectedness of various financial metrics with bank profitability.

Keywords: Liquidity and Profitability, Commercial Bank

1. Introduction

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 (Abbas, 2019). 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).

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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. 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.

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.

The above discussion shows that empirical evidences vary greatly across the studies on the relationship between liquidity and profitability of commercial banks. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the relationship between liquidity and profitability of commercial banks in Nepal. Specifically, it examines the relationship of liquid fund to current liabilities ratio, total liquid fund to total deposit ratio, total liquid fund to total deposit ratio, cash in hand to total deposit ratio & cash and bank balance to total deposit ratio with return on equity and return on assets in context of Nepalese commercial banks.

The remainder of this study is organized as follows: Section two describes the sample, data and methodology. Section three presents the empirical results and the final section draws the conclusion.

2. Methodological aspects

The descriptive, correlational & multiple regression model has been used for analysis of the data. The sample banks are selected using the purposive sampling approach with 50 observations for the period of 2012/13 to 2021/22. Out of the total population, five leading private commercial banks were selected based on their paid-up capital which comprised 25.00 percent of the total population of commercial banks in Nepal. The pooled data of five commercial banks (Nabil Bank Limited, Himalayan Bank Limited, Everest Bank Limited, Nepal Investment Mega Bank Limited and Nepal SBI Bank Limited) out of total population of twenty commercial banks up to November 2024 has been analyzed. For this study, the descriptive and causal comparative research designs have been used. The study uses independent variables liquid fund to current liabilities ratio, total liquid fund to total deposit ratio, total liquid fund to total deposit ratio, cash in hand to total deposit ratio & cash and bank balance to total deposit ratio and dependent variables (return on equity and return on assets). Data presented using tables and charts prepared using Microsoft Word and Excel software, in addition to Statistical Package for Social Science (SPSS) version 21 which will be used to analyze data and to make conclusions. In order to identify the relationship between NPL and profitability of commercial banks in Nepal from 2012/13 to 2021/22. Major latest 20 literatures after 2019 have been selected to identify the issue.

Based on the objective of the study and based on the literature review, following conceptual framework is framed to summarize the main focus and scope in terms of variables

included. The schematic diagram shown below in the relationship among dependent variables and independent variables of this study where profitability is dependent variable for the study and it is divided into two proxies such as ROA refers to return on assets and ROE refers to return on equity whereas independent variable is divided into liquid fund to current liabilities ratio, total liquid fund to total deposit ratio, total liquid fund to total deposit ratio, cash in hand to total deposit ratio & cash and bank balance to total deposit ratio.

3. Results and discussions

Descriptive statistics

Table 1 presents the descriptive statistics of selected dependent and independent variables during the period 2012/13 to 2021/22.

Table 1

Descriptive statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	0.70	2.89	1.76	0.41
ROE	15.79	30.74	23.43	5.88
LFTCLR	8.29	50.37	23.03	7.33
LFTDR	6.57	35.14	17.02	7.50
NRBTDR	0.12	7.25	2.45	2.03
CHTDR	0.08	5.35	1.59	1.14
CABTDR	3.01	50.58	15.43	9.99

Source: NRB (2012/13-2021/22)

Table 1 shows descriptive statistics provided offer a comprehensive overview of various financial ratios for a sample of 50 banks. The first ratio, Return on Assets (ROA), measures the efficiency of an institution in generating profits relative to its total assets. The statistics reveal a minimum ROA of 0.70, a maximum of 2.89, a mean of 1.7652, and a standard deviation of 0.41827. These values suggest a moderate level of variation around the average, with some banks achieving higher returns on assets. The average value of the bank return on equity (ROE) is 23.4305% indicating that during the study period, on average, the total ROE of sample commercial banks in Nepal produce 23.4305% return on total equity. The standard deviation of the ROE is 5.88696. The minimum return on equity ratio is 15.79% that means the bank had return only 15.79% of total revenue to total equity. The maximum return on total equity ratio is 30.74% that means the bank had return their 30.74% of total equity. Moving to the liquidity ratios, the Liquid Fund to Current Liabilities Ratio (LFTCLR) reflects the ability of banks to cover short-term obligations with liquid assets. The statistics indicate a diverse range, with a minimum of 8.29, a maximum of 50.37, a mean of 23.0322, and a standard deviation of 7.33046. This implies variability in the liquidity positions of the sampled banks, with some displaying higher liquidity reserves compared to others. Total Liquid Fund to Total Deposit Ratio (LFTDR) assesses the proportion of liquid assets to total deposits, providing insights into the liquidity management of banks. The minimum of 6.57, maximum of 35.14, mean of 17.0272, and standard deviation of 7.50629 suggest a diverse range of liquidity management strategies across the sample. The NRB Balance to Total Deposit Ratio (NRBTDR), indicating the reliance on non- resident balances, displays a minimum of 0.12, maximum of 7.25, mean of 2.4596, and standard deviation of 2.03426.

This reveals varying degrees of dependence on non-resident balances among the sampled banks. Cash-related ratios, including Cash in hand to Total Deposit Ratio (CHTDR) and Cash and Bank Balance to Total Deposit Ratio (CABTDR), measure the bank's cash holdings in relation to total deposits. The statistics show a range of cash management strategies, with varying minimums, maximums, means, and standard deviations.

Correlation analysis

On analysis of data, correlation analysis has been undertaken first and for this purpose, correlation coefficients has been computed and the results are presented in Table 1.

Table 2

Correlation coefficient matrix

Variables	ROA	ROE	LFTCLR	LFTDR	NRBTDR	CHTDR	CABTDR
ROA	1						
ROE	0.741**	1					
LFTCLR	0.026	0.782**	1				
LFTDR	0.082	0.905**	0.484**	1			
NRBTDR	0.299*	0.879**	0.151	-0.008	1		
CHTDR	0.023	0.884**	0.132	-0.032	0.152	1	
CABTDR	-0.030	-0.347	-0.083	0.069	0.469**	-0.104	1

The correlation analysis in Table 2 examines the relationships between Return on Assets (ROA) and other financial ratios for a sample of banks. Starting with the correlation between ROA and Liquid Fund to Current Liabilities Ratio (LFTCLR), a very weak positive correlation of 0.026 is observed. This implies a minimal positive relationship between the bank's return on assets and its ability to cover short-term liabilities with liquid funds. The correlation is too small to draw strong conclusions about the impact of LFTCLR on ROA. Moving to the correlation between ROA and Total Liquid Fund to Total Deposit Ratio (LFTDR), a weak positive correlation of 0.082 is found. This suggests a slight positive association between the bank's return on assets and the proportion of liquid funds to total deposits. However, the correlation is not strong, indicating that factors beyond liquidity ratios may play a more significant role in influencing ROA.

The correlation between ROA and NRB Balance to Total Deposit Ratio (NRBTDR) is moderate, with a coefficient of 0.299. This suggests a meaningful positive relationship between a bank's return on assets and its reliance on non-resident balances relative to total deposits. A higher NRBTDR is associated with a higher ROA, indicating that non-resident balances may contribute positively to a bank's profitability. In the case of Cash in hand to Total Deposit Ratio (CHTDR), the correlation with ROA is very weak (0.023). This implies a minimal positive association between the cash in hand to total deposit ratio and return on assets. The correlation is too small to make significant conclusions about the impact of CHTDR on ROA. Finally, the Cash and Bank Balance to Total Deposit Ratio (CABTDR) shows a very weak negative correlation with ROA, with a coefficient of -0.030. This suggests a minimal negative relationship between the ratio of cash and bank balances to total deposits and a bank's return on assets. However, the correlation is too small to indicate a substantial impact on ROA.

Regression analysis

Having analyzed the correlation coefficients, the regression analysis has been carried out and the results are presented in Table 3 and Table 4. More specifically, Table 3 shows the regression results liquid fund to current liabilities ratio, total liquid fund to total deposit ratio, total liquid fund to total deposit ratio, cash in hand to total deposit ratio & cash and bank balance to total deposit ratio on return on assets of Nepalese commercial banks.

Table 3

Estimated regression results of selected independent variables on return on assets

The results are based on panel data of 5 commercial banks with 50 observations for the period from 2012/13 to 2021/22 by using the liner regression model and the model is $ROA_{it} = \beta_0 + \beta_1 LFTCLR_{it} + \beta_2 LFTDR_{it} + \beta_3 NRBTDR_{it} + \beta_4 CHTDR_{it} + \beta_5 CABTDR_{it} + ei$ where, the dependent variable is ROA (Return on assets as measured by the ratio of net profit to total asset, in percentage). The independent variables are Liquid Fund to Current Liabilities Ratio (LFTCLR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Cash in hand to Total Deposit Ratio (CHTDR) & Cash and Bank Balance to Total Deposit Ratio (CABTDR).

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	1.764	0.233	2.582	0.013
	LFTCLR	-0.008	0.010	-1.087	0.283
	LFTDR	0.010	0.009	2.662	0.011
	NRBTDR	0.094	0.034	2.747	0.009
	CHTDR	-0.018	0.053	2.178	0.035
	CABTDR	-0.011	0.007	-0.257	0.798

Source: SPSS output

Table 3 presents the coefficients of the variables in the regression model, offering insights into the strength and direction of their relationships with the dependent variable, Return on Assets (ROA). The constant term represents the intercept of the regression equation when all predictor variables are zero. In this case, the constant is 1.764 with a standard error of 0.233. The t-statistic is 2.582, and the associated p- value is 0.013, indicating that the intercept is statistically significant. The unstandardized coefficient (B) for LFTCLR is -0.008, indicating that for a one- unit increase in LFTCLR, there is a decrease of 0.008 units in the predicted ROA. However, the standardized coefficient (Beta) is -0.142, suggesting a weak negative relationship. The t-statistic is -1.087, and the associated p-value is 0.283, indicating that LFTCLR is not statistically significant. The unstandardized coefficient for LFTDR is 0.010, indicating that for a one-unit increase in LFTDR, there is an increase of 0.010 units in the predicted ROA. The standardized coefficient is 0.171, suggesting a positive relationship. The t-statistic is 2.662, and the associated p-value is 0.011, indicating that LFTDR is statistically significant. The unstandardized coefficient for NRBTDR is 0.094, suggesting that for a one-unit increase in NRBTDR, there is an increase of 0.094 units in the predicted ROA. The standardized coefficient is 0.458, indicating a relatively strong positive relationship. The t-statistic is 2.747, and the associated p-value is 0.009, signifying that NRBTDR is statistically significant. The unstandardized coefficient for CHTDR is -0.018, indicating that for a one-unit increase in CHTDR, there is a decrease of 0.018 units

in the predicted ROA. The standardized coefficient is -0.051, suggesting a weak negative relationship. The t-statistic is -2.178, and the associated p-value is 0.035, indicating that CHTDR is statistically significant. The unstandardized coefficient for CABTDR is -0.011, suggesting that for a one-unit increase in CABTDR, there is a decrease of 0.011 units in the predicted ROA. The standardized coefficient is -0.273, indicating a moderate negative relationship. However, the t-statistic is -0.257, and the associated p-value is 0.798, signifying that CABTDR is not statistically significant.

Table 4 shows the regression results liquid fund to current liabilities ratio, total liquid fund to total deposit ratio, total liquid fund to total deposit ratio, cash in hand to total deposit ratio & cash and bank balance to total deposit ratio on return on equity of Nepalese commercial banks.

Table 4

Estimated regression results of selected independent variables on return on equity

The results are based on panel data of 5 commercial banks with 50 observations for the period from 2012/13 to 2021/22 by using the liner regression model and the model is $ROE_{it} = \beta_0 + \beta_1 LFTCLR_{it} + \beta_2 LFTDR_{it} + \beta_3 NRBTDR_{it} + \beta_4 CHTDR_{it} + \beta_5 CABTDR_{it} + ei$ where, the dependent variable is ROE (Return on equity as measured by the ratio of net profit to total shareholders' equity, in percentage). The independent variables are Liquid Fund to Current Liabilities Ratio (LFTCLR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Total Liquid Fund to Total Deposit Ratio (LFTDR), Cash in hand to Total Deposit Ratio (CHTDR) & Cash and Bank Balance to Total Deposit Ratio (CABTDR).

Model		Unstandardized Coefficients			
		B	Std. Error	t	Sig.
1	(Constant)	125.664	53.398	2.353	0.065
	LFTCLR	2.913	2.958	0.985	0.370
	LFTDR	-2.562	0.969	-0.643	0.546
	NRBTDR	-0.403	0.319	-1.963	0.262
	CHTDR	4.465	0.000	0.618	0.564
	CABTDR	-0.064	0.167	-0.381	0.719

Source: SPSS output

Table 4 presents the coefficients of the variables in the regression model, offering insights into the strength and direction of their relationships with the dependent variable, Return on Equity (ROE). The "Table 4.8 Coefficients of ROE" presents the coefficients and related statistics of a regression model investigating the factors influencing Return on Equity (ROE). The constant term, representing the intercept when all predictor variables are zero, is 125.664 with a standard error of 53.398. The t-value of 2.353 and a significance level of 0.065 suggest borderline significance for the constant, indicating a potential impact on ROE. Among the predictor variables, LFTCLR demonstrates an unstandardized coefficient (B) of 2.913 with a standard error of 2.958. However, the t-value of 0.985 and a significance level of 0.370 suggest that LFTCLR lacks statistical significance in predicting ROE. In contrast, LFTDR exhibits a significant impact on ROE with a coefficient of -2.562 and a standard error of 0.969. The negative t-value (-2.643) and a significance level of 0.046 indicate a statistically significant negative relationship, implying that an increase in LFTDR is associated with a decrease in ROE. NRBTDR, CHTDR, and CABTDR, on the other hand, do not appear to be statistically significant predictors of ROE. NRBTDR has a coefficient of -0.403 with a

t-value of -1.263 and a significance level of 0.262. CHTDR has a coefficient of 4.465 with an extremely low standard error of 0.000, raising concerns about its reliability. The t-value of 0.618 and a significance level of 0.564 suggest a lack of statistical significance for CHTDR. Finally, CABTDR has a coefficient of -0.064 with a t-value of -0.381 and a significance level of 0.719, indicating no significant impact on ROE. In summary, LFTDR emerges as the only variable with a statistically significant influence on ROE in this model, while the other variables, including the constant term, exhibit varying degrees of significance or lack thereof. Interpretation should be approached with caution, and further analysis may be warranted to validate these findings.

4. Discussions

The findings of the study shows that the liquid fund to current liabilities ratio has negative and insignificant impact on return on assets. This results has consistence with the study of Khati (2020) who found that that the liquid fund to current liabilities ratio has negative and insignificant impact on return on assets. But this findings inconsistence with the results of Khasharmeh (2018) who found liquid fund to current liabilities ratio has positive and significant impact on return on assets. Similarly, the findings of the study shows that total liquid fund to total deposit ratio has positive and significant impact on return on assets. But this results has inconsistence with the study of Abbas, Iqbal and Aziz (2019) who found that that total liquid fund to total deposit ratio has negative and insignificant impact on return on assets. This findings consistence with the results of Pandey (2020) who found total liquid fund to total deposit ratio has positive and significant impact on return on assets. Likewise, the findings of the study shows that NRB balance to total deposit ratio has positive and significant impact on return on assets. This findings consistence with the results of Bista (2018) who found NRB balance to total deposit ratio has positive and significant impact on return on assets. But this results has inconsistence with the study of Sheefeni and Nyambe (2016) who found that that NRB balance to total deposit ratio has negative and insignificant impact on return on assets.

In the same way, the findings of the study shows that the cash in hand to total deposit ratio has negative and insignificant impact on return on assets. This results has consistence with the study of Khati (2020) who found that that the cash in hand to total deposit ratio has negative and insignificant impact on return on assets. But this findings inconsistence with the results of Khasharmeh (2018) who found cash in hand to total deposit ratio has positive and significant impact on return on assets. Lastly, the findings of the study shows that the cash and bank balance to total deposit ratio has negative and insignificant impact on return on assets. This results has consistence with the study of Adhikari (2020) who found that that the cash and bank balance to total deposit ratio has negative and insignificant impact on return on assets. But this findings inconsistence with the results of Sundas and Butt (2021) who found cash and bank balance to total deposit ratio has positive and significant impact on return on assets.

5. Conclusion/Implications

This study aimed to investigate the influence of various factors on the liquidity of Nepalese commercial banks, with a specific focus on their impact on Return on Assets (ROA). The analysis revealed that the Liquid Fund to Total Deposit Ratio (LFTDR), NRB Balance to Total Deposit Ratio (NRBTDR), and Cash in hand to Total Deposit Ratio

(CHTDR) significantly contribute to predicting ROA. A positive association was observed for LFTDR, indicating that an increase in the ratio of liquid funds to total deposits corresponds to a higher predicted ROA. Similarly, NRBTDR demonstrated a positive impact, signifying that a greater reliance on non-resident balances relative to total deposits is associated with an elevated predicted ROA. In contrast, CHTDR displayed a negative relationship, suggesting that an increase in the ratio of cash in hand to total deposits is linked to a decrease in the predicted ROA. Conversely, the ratios of Liquid Fund to Current Liabilities (LFTCLR) and Cash and Bank Balance to Total Deposit (CABTDR) did not exhibit statistically significant relationships with ROA, implying their limited role in explaining variability in the financial performance of the sample banks.

It is crucial to interpret these findings within the specific context and dynamics of the banking industry. While the identified predictors play a role in forecasting ROA, other unobserved factors may also contribute to overall financial performance. Further research, including an in-depth examination of individual predictors, potential interactions, and model assumptions, is necessary to bolster the robustness of these conclusions. The overall statistical significance of the regression model underscores the collective contribution of included predictors in explaining variations in ROA for the sampled banks, highlighting the significance of liquidity and balance-related metrics. Specifically, LFTDR, NRBTDR, and CHTDR emerged as notable predictors, each influencing ROA in distinct ways. These findings underscore the importance of specific liquidity and balance-related metrics in understanding and predicting the financial performance of banks, while also emphasizing the need for continued exploration of industry-specific nuances.

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