An Impact of Liquidity on the Profitability of Commercial Banks in Nepal (A Case Study of Agriculture Development Bank Limited and Nepal Bank Limited)

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Abstract

The study examines the relationship between liquidity and profitability in 20 Nepalese commercial banks, focusing on Nepal Bank Ltd. and Agriculture Development Bank Limited. The research used descriptive and causal-comparative approaches, analyzing financial indicators like return on assets (ROA), return on equity (ROE), CR, CRR, CBBISD, and IGSCA. Results showed that liquidity indicators significantly influence profitability, with CR negatively influencing ROA and ROE, CRR weakly influencing ROA and ROE, and IGSCA showing limited influence. The findings underscore the importance of effective liquidity management for enhancing profitability and recommend stable liquidity practices to reduce variability.

Key Words: *Liquidity and Profitability, Current Ratio, Cash Reserve Ratio, Cash and Bank Balance, Interest Sensitive Deposit*

Introduction

Profitability and liquidity are important metrics that shed light on the longevity and performance of companies. Ahmad (2016) believed that companies need to strike a balance between profitability and liquidity to guarantee long-term survival and strong growth. The growth and survival of a company depend on its ability to create profits and manage its liquidity effectively, therefore financial managers must balance these two criteria (Kimondo, 2014). Because liquidity might risk customer deposits, managing liquidity is particularly crucial during bankruptcy and liquidation (Odunayo & Oluwafeyisayo, 2015). Sustaining operations, preserving depositor confidence, fostering sustainable growth, and empowering banks to fulfill their immediate commitments all depend on having enough liquidity (Ibe, 2013).

As financial intermediaries, commercial

banks are essential to an economy because they constantly transfer money from depositors to investors. They can only carry out this function efficiently if they make enough money to pay for their overhead, necessary for which is appropriate intermediation (Lukorito et al., 2014). The importance of commercial banks' activities within the banking industry is highlighted by their significant contribution to the expansion and development of the economy (Odunga, 2016). Commercial banks' cash reserves, or liquid assets, for their depositors, support economic expansion and stability. An effective banking system is one of the main factors of higher economic growth. Selvam and Miencha (2013). As a result, banks must keep enough cash reserves, liquid assets, and potential borrowing lines to satisfy both anticipated and unforeseen liquidity demands. In essence, liquidity is the instantaneous capacity to fulfill financial obligations. The ability to swiftly trade a variety of assets at current market values and the calculated methods used by financial institutions to satisfy their cash and collateral needs without suffering significant losses are the two primary facets of its administration. According to Shrestha (2012), this dual focus highlights the crucial balance between risk mitigation and asset flexibility that is required to efficient liquidity management.

One of the most important aspects of financial decision-making in commercial banks is liquidity management. То guarantee seamless operations and effectively fulfill short-term financial obligations, it comprises maximizing the balance between profitability and liquidity. Good liquidity management protects against unforeseen losses and guarantees financial stability by ensuring that businesses have enough cash on hand or assets that can be swiftly turned into cash to pay for urgent obligations. Strategic management choices that carefully distribute resources while accounting for the trade-offs between profitability and liquidity are necessary to achieve this equilibrium (Lukorito et al., 2014). Liquidity is essential to the banking sector for overseeing day-to-day operations and fulfilling commitments such loan disbursements, investments, and withdrawals.

Profitability is a crucial indicator of a bank's performance, but if it takes preference over liquidity, the institution's financial stability may be undermined. Banksmustthuscarefullystrikeacompromise between maximizing profitability through wise lending and investment strategies

and preserving sufficient liquidity to pay short-term obligations (Ibrahim, 2017). For banking institutions to remain financially stable and operate efficiently, effective liquidity management is crucial. Ismail (2016) asserts that maintaining market liquidity levels necessitates a calculated strategy to guarantee the bank's profitability and seamless day-to-day operations. Understanding the bank's unique liquidity requirements and evaluating the existing liquidity situation in the banking system are crucial components of this procedure.

Since profitability indicates a company's financial stability and capacity to continue operating, it continues to be a top priority for financial institutions. It additionally functions as an indicator of the success of the funding, operating, and investment policies put in place by bank management (Ariyadasa et al., 2017). However, many banks may find it difficult to balance efficiency and liquidity.

The capital adequacy ratio, as it relates to commercial banking, is an essential measure of financial competence and is critical to maintaining stability and effectiveness in the banking industry (Shukla et al., 2013). According to Khati's (2021) Hausman test and fixed effects technique, return on equity (ROE) has a positive and significant link with asset quality (AQ), whereas return on assets (ROA) has a negative and significant relationship with AQ. There is a slight but favorable correlation between the cash-deposit ratio (CADR), return on equity (ROE), and return on assets (ROA). However, the research indicates that creditdeposit (CDR) has a weak but positive correlation with return on equity (ROE) and a strong negative correlation with ROA. With a R square value of 0.628, Chaurasia (2024) discovered a strong positive correlation between the dependent variable and the set of independent variables, with the independent variables explaining 62.8% of the variation in the dependent variable and other variables not included in the model accounting for 37.2%. Although CAR had a minor impact on Nepal's commercial banks' return on assets (ROA), the results showed that CDR and CRR had a significant impact.

So, the present study focuses on the impact of liquidity on the profitability of Nepal's commercial banks, specifically Agriculture Development Bank Limited and Nepal Bank Limited, and centers on how each bank's ability to generate profits is impacted by its liquidity levels. Banks with high liquidity can fulfill their immediate obligations and stay out of financial trouble. Excessive

liquidity, on the other hand, may indicate that the bank is not making the most use of its resources, which could result in decreased profitability. Because low liquidity allows banks to obtain greater loan returns, it may increase profitability. But if they can't pay their debts, they run a higher danger of going bankrupt. Drawing accurate conclusions would require a thorough review of these institutions' financial data to comprehend the unique dynamics inside them.

Banks are essential for corporate activities, utilizing money from depositors. They are governed by Nepal Rastra Bank and are governed by a CEO and board of directors. Capital adequacy is a crucial indicator of a bank's financial health, with a positive correlation with financial stability. The cost-to-income ratio, an internal element affecting bank capital and management effectiveness, can negatively affect bank performance. This study aims to explore the relationship between liquidity management and profitability of commercial banks in Nepal, focusing on key liquidity indicators like the current ratio, cash reserve ratio, CBBISD, and IGSCA. This will provide insights into the financial dynamics driving the performance of commercial banks in Nepal. The study guides the following research questions:

What is the current liquidity situation of Agriculture Development Bank Limited and Nepal Bank Ltd? What is the current profitability situationofAgricultureDevelopment Bank Limited and Nepal Bank Ltd? How does liquidity affect the profitability of Nepal Bank Ltd. and Agriculture Development Bank Limited?

The objective of the study based on the research questions are:

To evaluate Nepal Bank Ltd.'s Agriculture Development and Bank Limited's liquidity situation. To assess Nepal Bank Ltd.'s and Agriculture Development Limited's Bank profitability To examine how liquidity affects Nepal Bank Ltd.'s and Agriculture Development Bank Limited's profitability.

Literature Review

Commercial banks follow their bank policies and Nepal Rastra Bank's (NRB) instructions when allocating their deposits to lucrative industries. Researchers and organizations must undertake current studies that conform with the most recent research and NRB guidelines, as these policies and procedures change over time (Bhati et al.,

2019; Budhathoki & Rai, 2020; Gnawali, 2018, Poudel, 2016). While research on bank profitability using several variables is available in Nepal, there are few studies on these variables. However, no study focuses on these factors in a commercial bank setting.

A key factor in evaluating the financial performance of commercial banks is financial analysis, which is of great importance to stakeholders who want to understand the state of the bank. A descriptive and causal-comparative research design is used in this study. This study examines the impact of internal factors on the performance of Nepalese commercial banks: agriculture Development Bank and Nepal Bank Ltd., taking into account variables like cost-to-income ratio, liquidity position, nonperforming loans, asset quality, capital adequacy, bank size, and profitability, in contrast to earlier research that focused on comparative financial analysis related to factors like capital adequacy, debt-toequity, equity ratio, and bank profitability. (Bhattarai, 2020; Hakuduwal, 2021; Mishra et al., 2021).

The operations of commercial banks are hampered by the significant withholding of data regarding liquidity management and profitability in industrial banks. From 2012 to 2016, Shrestha (2018) studied the profitability and liquidity management of Nepal's commercial banks. The results of the liquidity have no discernible effect on Nepalese commercial banks' profitability Ally (2014) used the fixed effects regression model on panel data from 23 banks between 2009 and 2013, and the empirical findings indicate that bank-specific characteristics (influenced by management at the bank level) have a substantial impact on Tanzanian banks' profitability.

Using a sample of eight commercial banks founded in or before 1995 for the years March 2003 to December 2010, Shrestha (2012) examined the effect of liquidity on the profitability of commercial banks in Nepal and found that the banks' "NRB to deposit ratio" and "cash-vault to deposit ratio" had a favorable, noteworthy effect on the country's profitability. Additionally, it has found no evidence of a substantial relationship between profitability and the "Liquid fund to deposit ratio," "Cash and bank balance to deposit ratio," or "Liquid fund to current liability ratio." Similarly, Khan & Ali (2016) performed regression and correlation analysis, and the findings showed a strong positive association between bank profitability and liquidity.

Analysis was conducted using secondary data that was taken from Habib Bank Limited's annual statements for the previous five years, from 2008 to 2014. Using an OLS regression model using panel data from 575 listed and non-listed Eurozone banks, Cucinelli (2013) discovered no meaningful correlation between liquidity and long-term default probability.

A study by Khasharmeh (2018) used a sample of six Islamic banks to investigate the effect of liquidity on the profitability of Islamic banks from 2010 to 2015. The study's findings demonstrate a favorable correlation between ROE and bank cash due to total deposits (CDTD) and investment to total assets (INVSTD). Furthermore, there is a negative association between ROE and cash and due from banks to total deposits CDTD and investment to total assets INVISTA. Rijal (2019) studied the effect of liquidity on Nepalese commercial banks' profitability using a sample of eight commercial banks from 2011 to 2017. The findings indicated that while only the credit-to-deposit ratio is important and favorable to return on assets, the credit-to-deposit, asset quality, and liquidity ratios are all significant and positive with net interest margin.

Using a case study of Nepal Bank Ltd. and Agriculture Development Bank Limited,

this study aims to investigate how liquidity affects the profitability of Nepalese commercial banks. The current ratio (CR), cash reserve ratio (CRR), cash and bank balance to interest-sensitive deposit (CBBISD), and government securities investment in current assets (IGSCA) are among the important liquidity indicators that are examined. The study intends to gain insight into the financial dynamics that accelerate the performance of Nepal's commercial banks by examining these liquidity measurements and determining how they affect these banks' profitability.

Research Method

This study investigates the impact of liquidity on the profitability of Nepal's Commercial Banks using a combination of descriptive and causal-comparative research designs. The population includes all 20 commercial banks in Nepal, with two prominent banks, Nepal Bank Ltd. and Agriculture Development Bank Ltd., selected using judgmental sampling. Data is collected from annual reports two Nepali commercial banks, covering fiscal years 2013–14 through 2022–23. The study uses Microsoft Excel, SPSS, and Microsoft Excel for data analysis, using financial instruments like ROA, ROE, CR, CRR, CBBISD, and

IGSCA. Correlation and regression analysis are performed to evaluate the relationship between liquidity and profitability. The study aims to provide a comprehensive understanding of the liquidity-profitability dynamics in Nepal's banking industry.

Research Framework

This study used a research paradigm created by Pokharel and Pokhrel (2019) that looks at how liquidity variables affect commercial banks' financial performance. Current Ratio (CR), Cash Reserve Ratio (CRR), Cash and Bank Balance to Interest Sensitive

Figure 1. Research Framework

Deposit (CBBISD), and Investment of Government Securities in Current Assets (IGSCA) are the four main independent variables that are taken into account by the framework. These factors were picked because they have an impact on financial performance and are pertinent to banking sector liquidity management. Return on Equity (ROE) and Return on Assets (ROA), two dependent variables, are examined in the study. Indicative of a bank's operational effectiveness and financial stability, ROA and ROE are often used metrics to evaluate its profitability.



Results and Discussion

By outlining the results of the descriptive, correlational, and regression analyses,

this part offers a thorough review of the study's findings. These results provide understandings of the variables being

examined. To better comprehend the findings of the current study, the discussion also includes a comparative analysis with pertinent data from earlier research projects, looking for similarities and differences.

Bank Ltd. for the fiscal years 2013–14 to 2022–2023 is examined in this section. One important financial indicator for evaluating a company's short-term liquidity and capacity to pay short-term debts is the current ratio. An understanding of these two banks' liquidity levels can be obtained by comparing their current assets and current liabilities during the given time period.

Current Ratio Descriptive Analysis (CR)

The current ratio (CR) for Agriculture Development Bank Limited and Nepal

Table 1

Descriptive Analysis of Current Ratio (CR)							
FY	NBL	ADBL	Average	S.D.	C.V.		
2013/14	1.123	0.319	0.721	0.569	0.789		
2014/15	1.130	0.305	0.717	0.583	0.813		
2015/16	1.343	0.118	0.731	0.866	1.186		
2016/17	1.386	0.151	0.768	0.873	1.137		
2017/18	1.066	1.234	1.150	0.119	0.104		
2018/19	1.160	1.227	1.194	0.047	0.040		
2019/20	1.095	1.214	1.155	0.084	0.073		
2020/21	1.122	1.254	1.188	0.094	0.079		
2021/22	1.114	1.281	1.197	0.118	0.098		
2022/23	1.102	1.255	1.179	0.108	0.092		
Average	1.164	0.836					
S.D.	0.109	0.531					
C.V.	0.094	0.635					

Descriptive Analysis of Current Ratio (CR)

Source: Annual Report of Sample Banks

The Current Ratio (CR) for two banks, NBL and ADBL, from 2013-2014 to 2022-23 is analyzed. NBL has a constant CR of 1.164, while ADBL has a 0.836 starting low but steadily improving since 2017. The standard deviation indicates fluctuation over time, with ADBL showing increased variability. NBL's CR started in 2013-14 with a healthy CR of 1.123, while ADBL's CR was low, indicating potential liquidity problems. After 2017, both banks showed significant improvement in liquidity management.

Cash Reserve Ratio (CRR)

Table 2

must maintain as reserves with the central bank is shown by the cash reserve ratio.

1	2 0				
FY	NBL	ADBL	Average	S.D.	C.V.
2013/14	9.600	30.430	20.015	14.729	0.736
2014/15	11.550	28.740	20.145	12.155	0.603
2015/16	17.460	23.330	20.395	4.151	0.204
2016/17	18.810	31.180	24.995	8.747	0.350
2017/18	9.050	29.150	19.100	14.213	0.744
2018/19	4.060	27.200	15.630	16.362	1.047
2019/20	4.530	33.980	19.255	20.824	1.082
2020/21	4.190	36.210	20.200	22.642	1.121
2021/22	3.490	25.960	14.725	15.889	1.079
2022/23	7.970	30.100	19.035	15.648	0.822
Average	9.071	29.628			
S.D.	5.513	3.735			
C.V.	0.608	0.126			

Descriptive Analysis of Cash Reserve Ratio (CRR)

The percentage of total deposits that banks

Source: Annual Report of Sample Banks

The cash reserve ratio (CRR) for Nepal Bank Ltd and Agriculture Development Bank Limited from FY 2013/14 to FY 2022/23 varies significantly. NBL's CRR fluctuates from 9.600% to 18.810%, with a moderate level of cash reserves. ADBL's CRR is higher, with an average of 29.628%, indicating a stronger liquidity position. Despite these fluctuations, ADBL maintains higher CRR levels, with a lower variability in cash reserve management and a high degree of stability.

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Cash and Bank Balance to Interest Sensitive Deposit (CBBISD)

Table 3							
Descriptive Analysis of Cash and Bank Balance to Interest Sensitive Deposit (CBBISD)							
FY	NBL	ADBL	Average	S.D.	C.V.		
2013/14	8.013	11.345	9.679	2.356	0.243		
2014/15	10.263	12.096	11.179	1.296	0.116		
2015/16	22.980	9.650	16.315	9.425	0.578		
2016/17	20.145	14.348	17.246	4.100	0.238		
2017/18	12.120	18.550	15.335	4.547	0.296		
2018/19	17.415	14.026	15.721	2.396	0.152		
2019/20	7.761	14.697	11.229	4.904	0.437		
2020/21	8.148	12.565	10.356	3.123	0.302		
2021/22	7.726	7.665	7.695	0.043	0.006		
2022/23	11.638	8.301	9.969	2.360	0.237		
Average	12.621	12.324					
S.D.	5.603	3.291					
C.V.	0.444	0.267					

Source: Annual Report of Sample Banks Table 3 shows the cash and bank balance to interest-sensitive deposit (CBBISD) ratios for Nepal Bank Ltd and Agriculture Development Bank Limited from FY 2013/14 to FY 2022/23. NBL's CBBISD fluctuated from 8.013% in FY 2013/14 to 22.980% in FY 2015/16, with an average ratio of 12.621%. ADBL's CBBISD was slightly more consistent, starting at 11.345% in FY 2013/14 and showing moderate fluctuations. Both banks maintained similar liquidity levels, but ADBL showed lower variability and lower risk management.

Investment of Government Securities in Current Assets (IGSCA)

It examines the IGSCA ratio for Nepal Bank Ltd and Agriculture Development Bank Limited from 2013/14 to 2022/23, providing insights into their investment strategies and liquidity management practices.

An Impact of Liquidity on the Profitability	of Commercial Banks in Nepal
Table 4	

FY	NBL	ADBL	Average	S.D.	C.V.
2013/14	25.532	49.471	37.502	16.928	0.451
2014/15	18.312	42.157	30.235	16.861	0.558
2015/16	10.617	58.392	34.505	33.782	0.979
2016/17	6.865	37.337	22.101	21.547	0.975
2017/18	11.553	8.707	10.130	2.012	0.199
2018/19	9.131	10.842	9.986	1.210	0.121
2019/20	17.483	13.262	15.373	2.985	0.194
2020/21	13.265	16.458	14.861	2.258	0.152
2021/22	16.478	17.391	16.935	0.645	0.038
2022/23	19.659	19.845	19.752	0.131	0.007
Average	14.890	27.386	-		
S.D.	5.643	17.841			
C.V.	0.379	0.651			

Descriptive Analysis of Investment of Government Securities in Current Assets (IGSCA)

Source: Annual Report of Sample Banks

Table 4 shows the investment of government securities in current assets (IGSCA) ratios for Nepal Bank Ltd and Agriculture Development Bank Limited from FY 2013/14 to FY 2022/23. NBL's IGSCA ratio fluctuated significantly, dropping from 25.532% in FY 2013/14 to 19.659% by FY 2022/23. ADBL's IGSCA ratio was higher, reaching 19.845% in FY 2022/23, but with greater variability

and a higher level of risk due to the large fluctuations.

Return on Assets (ROA)

The Return on Assets (ROA) of Nepal Bank Ltd and Agriculture Development Bank Limited is analyzed from 2013/14 to 2022/23, assessing their profitability efficiency.

Descriptive Analysis of Return on Assets (ROA)							
FY	NBL	ADBL	Average	S.D.	C.V.		
2013/14	0.920	1.760	1.340	0.594	0.443		
2014/15	0.550	3.120	1.835	1.817	0.990		
2015/16	2.790	2.320	2.555	0.332	0.130		
2016/17	2.780	2.150	2.465	0.445	0.181		
2017/18	2.410	2.540	2.475	0.092	0.037		
2018/19	1.510	2.767	2.139	0.889	0.416		
2019/20	1.220	1.858	1.539	0.451	0.293		
2020/21	1.330	1.586	1.458	0.181	0.124		
2021/22	1.120	0.900	1.010	0.156	0.154		
2022/23	1.810	0.498	1.154	0.928	0.804		
Average	1.644	1.950					
S.D.	0.782	0.813					
C.V.	0.476	0.417					

26 The Journal of Madhyabindu Multiple Campus, Vol. 10, No. 1, 2025 Table 5

Source: Annual Report of Sample Banks

Table 5 shows the return on assets (ROA) for Nepal Bank Ltd and Agriculture Development Bank Limited from FY 2013/14 to FY 2022/23. NBL's ROA fluctuated from 0.920% in FY 2013/14 to 2.790% in FY 2015/16, but maintained an average of 1.644%, indicating moderate profitability. ADBL's ROA was higher and more stable, with a peak of 3.120% in FY 2014/15 and a low of 0.498% in FY

2022/23. Both banks exhibited moderate risk.

Return on Equity (ROE)

It examines the Return on Equity (ROE) of Nepal Bank Ltd and Agriculture Development Bank Limited from 2013/14 to 2022/23, providing insights into their profitability relative to shareholders' investment.

EV	NDI		A	C D	C V
ГІ	NDL	ADBL	Average	S.D.	C.v.
2013/14	21.420	11.668	16.544	6.896	0.417
2014/15	12.630	22.210	17.420	6.774	0.389
2015/16	16.507	13.597	15.052	2.058	0.137
2016/17	7.572	11.769	9.670	2.968	0.307
2017/18	14.610	13.010	13.810	1.131	0.082
2018/19	9.950	14.784	12.367	3.418	0.276
2019/20	7.870	11.702	9.786	2.710	0.277
2020/21	9.360	11.197	10.278	1.299	0.126
2021/22	8.510	6.673	7.591	1.299	0.171
2022/23	9.550	3.867	6.709	4.018	0.599
Average	11.798	12.048	_		
S.D.	4.495	4.842			
C.V.	0.381	0.402			

Descriptive Analysis of Return on Equity (ROE)

Table 6

Source: Annual Report of Sample Banks

Table 6 shows the return on equity (ROE) for Nepal Bank Ltd and Agriculture Development Bank Limited from FY 2013/14 to FY 2022/23. NBL's ROE fluctuated significantly over the 10 years, with a high of 21.42% in FY 2013/14 and a low of 7.57% in FY 2016/17. ADBL's ROE was more stable but lower, with an average of 12.048%, comparable to NBL's average, but showing more variability. The

C.V. of 0.402 indicates higher relative risk and variability in ADBL's returns.

Correlation Analysis

Correlation analysis examines the correlation between liquidity metrics, profitability indicators, and government securities investment in Nepal's commercial banks, including the current ratio, cash reserve ratio, and CBBISD.

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Correlation	Matrix					
Variables	CR	CRR	CBBISD	IGSCA	ROA	ROE
CR	1					
CRR	-0.268	1				
	(0.253)					
CBBISD	0.192	0.214	1			
	(0.417)	(0.365)				
IGSCA	-0.925**	0.308	-0.34	1		
	(0.000)	(0.186)	(0.143)			
ROA	-0.264	0.293	0.676**	0.092	1	
	(0.026)	(0.021)	(0.001)	(0.070)		
ROE	-0.325	0.074	0.179	0.295	0.474*	1
	(0.016)	(0.008)	(0.045)	(0.021)	(0.035)	
Variables	CR	CRR	CBBISD	IGSCA	ROA	ROE

Correlation Matrix

Table 7

Source: Annual Report of Sample Banks

With a p-value of 0.026, the CR (Cash Ratio) correlation is -0.264. This weak negative link, which is statistically significant, shows that ROA tends to marginally decline as CR rises. The p-value is 0.021 and the CRR (Current Ratio) correlation is 0.293. This demonstrates a statistically significant weak positive correlation, suggesting that ROA tends to rise somewhat in parallel with CRR. With a p-value of 0.001, the correlation between cash balance and bank investment standard deviation, or CBBISD, is 0.676**. This significant positive correlation is quite significant, suggesting that ROA rises significantly when CBBISD rises. The

correlation between IGSCA (Investment Grade Standard Corporate Assets) and p-value is 0.092 and 0.070, respectively. This favorable link is not statistically significant and is quite weak.

The CR correlation is -0.325 and the p-value is 0.016. This is a modest negative association that is statistically significant, suggesting that ROE tends to decrease slightly as CR increases. The CRR correlation is 0.074 and the p-value is 0.008 respectively. There appears to be a slight link between rising ROE and rising CRR, as evidenced by this statistically significant but incredibly small positive correlation. The CBBISD correlation is 0.179 and

the p-value is 0.045. This statistically significant and marginally positive relationship indicates that higher CBBISD values are significantly connected with higher ROE. The IGSCA correlation is 0.295 and the p-value is 0.021. According to this marginally positive and statistically significant correlation, ROE often increases when IGSCA does.

In this way, the most important variable in the matrix for ROA is CBBISD, which has a strong and considerable positive impact on ROA. Although the correlations are minor, CR has a negative effect on both ROA and ROE. Both ROA and ROE have **Table 7**

weakly positive correlations with CRR. In contrast to ROA, IGSCA exhibits a weak but noteworthy positive correlation with ROE. These findings suggest the modest significance of CR, CRR, and IGSCA for ROE and the significance of CBBISD for ROA.

Regression Analysis

The study uses regression analysis to evaluate the impact of liquidity metrics on profitability indicators like return on assets and return on equity for commercial banks in Nepal, thereby assessing the relationship between these variables.

Model	Beta	T-statistics	p-value	VIF
(Constant)	1.866	1.172	0.260	-
CR	0.524	-1.490	0.016	3.195
CRR	0.004	0.359	0.007	1.520
CBBISD	0.121	3.528	0.003	1.520
IGSCA	-0.017	-0.647	0.005	2.654
R-Square	0.629			
Adjusted R-Square	0.530			
F-statistics	6.367			
	(0.003)			
DW Statistics	0.859			

Regression Analysis

Dependent Variable: ROA

CR, CRR, CBBISD, and IGSCA are the independent variables in the model that account for 62.9% of the variation in

ROE, according to the R-Square value of 0.629. The R-Square value is adjusted to reflect the number of predictors in the model, showing that 53.0% of the

variation is explained once the number of predictors has been account for. The statistical significance of the F-statistics (6.367, p-value = 0.003) indicates that the predictors as a whole significantly impact ROE. The residuals may have positive selfcorrelation as shown by the Durbin-Watson (DW) Statistic (0.859), since values much less than 2 imply positive autocorrelation. CBBISD is an important variable since it has the largest and most notable positive impact on ROE. Although their effects are not as noticeable, CR and CRR also have strong correlations with ROE. ROE is significantly impacted by IGSCA in a minor negative way. Though the model accounts for a significant amount of the variation in ROE, the Durbin-Watson statistic raises possible autocorrelation problems that warrant additional research.

Findings

The current ratio (CR) has a weak negative correlation with return on assets (ROA), with a Pearson correlation coefficient of -0.264. This indicates that as the current ratio increases, ROA tends to decrease. The cash reserve ratio (CRR) shows a weak positive correlation with ROA, with a p-value of 0.021. The cash and bank balance to interest-sensitive deposit (CBBISD) shows a moderate to strong positive correlation with ROA, with a p-value of 0.001. The investment of government securities in current assets (IGSCA) presents a very weak positive correlation with ROA, but does not reach statistical significance at the 5% level. Regarding return on equity (ROE), the current ratio (CR) has an unstandardized beta of -1.298 and a standardized beta of -0.671, indicating a statistically significant negative relationship with ROA. The cash reserve ratio (CRR) has an unstandardized beta of 0.004 and a standardized beta of 0.065, indicating a weak positive relationship with ROA. The cash and bank balance to interest-sensitive deposit (CBBISD) has an unstandardized beta of 0.121 and a standardized beta of 0.684, suggesting a strong positive relationship with ROA. The investment of government securities in current assets (IGSCA) has an unstandardized coefficient of 0.137 and a standardized beta of 0.434, indicating a positive relationship with ROE.

Discussion

This study examined the liquidity status of Nepal Bank Ltd. (NBL) and Agriculture Development Bank Limited (ADBL) and found that NBL maintained stable liquidity,

while ADBL showed more variability. The study also assessed the profitability of NBL and ADBL, analyzing how liquidity indicators relate to profitability metrics. Results showed a weak negative correlation between the current ratio and return on assets, suggesting that higher liquidity may slightly reduce profitability. The cash reserve ratio showed a weak positive correlation with return on assets, suggesting a modest boost in profitability with higher cash reserves. Cash and bank balance to interest-sensitive deposits positively correlated with return on assets, implying that increased liquidity in these deposits aligns with higher profitability. Investment in government securities had minimal impact on profitability metrics, showing an insignificant positive relationship with return on assets and equity. The study also assessed the impact of specific liquidity indicators on the profitability of NBL and ADBL. The current ratio displayed a significant negative impact on both return on assets (ROA) and return on equity (ROE), suggesting that excessive liquidity may reduce profitability.

Conclusions

This study examines the liquidity status of Nepal Bank Ltd (NBL) and Agriculture Development Bank Limited (ADBL) and their relationship with profitability metrics. NBL has consistently maintained a stable liquidity position, while ADBL has shown more variability and risk. The study also examines the relationship between liquidity indicators and profitability metrics. The current ratio has a weak negative correlation with return on assets, suggesting that higher liquidity is associated with lower profitability. The cash reserve ratio has a weak but positive correlation with return on assets, suggesting that increased cash reserves correspond to slightly higher profitability. The relationship between cash and bank balance to interest-sensitive deposits and return on assets is moderately positive, suggesting that increased cash liquidity aligns with higher profitability. The study also assesses the impact of liquidity on profitability, finding a negative relationship between return on assets (ROA) and return on equity (ROE). The cash reserve ratio has a weak positive relationship with ROA but a negative correlation with ROE, indicating that excessive cash reserves may limit equity returns. The study concludes that optimizing cash and bank balances is crucial for improving profitability.

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