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Impact of Credit Risk Management on the Profitability of Commercial Banks in Nepal

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Abstract

This study aims to investigate the impact of credit risk management on profitability of commercial banks in Nepal. This study was based on descriptive and causal research design. Out of 20 commercial banks of Nepal, five banks were selected as samples using the lottery method. Secondary data were collected from the annual report to conduct this study from FY 2014/15 to FY 2023/24. The CDR, NPL and CAR serve as independent variables while return on assets (ROA) and earnings per share (EPS) are used as dependent variable in Nepali commercial banks. The regression results indicate that the coefficient of CAR is positive and rest of the NPL and CAR have negatively related with ROA under model I. Under the model II, coefficient of CDR, NPL and CAR are negatively related with EPS. The findings of the study reveal that there is a negative relationship between the credit deposit ratio and non-performing loans with return on assets and earnings per share. The capital adequacy ratio does not have a significant effect on return on assets and earnings per share. Future research direction could be taking moderating variable such as size of the bank to define the impact of credit risk management on profitability of commercial bank in Nepal.

Keywords: *Capital adequacy, credit deposit ratio, earning per share, non-performing loan, return on asset*

Introduction

Bank is a financial institution that accepts deposits and lends the money to their customers. Commercial banks are the heart of the depository financial institution. Banks earn profits from the difference between the interest rates they pay on deposits and the rates they charge on loans. Credit risk management is the process of identifying, assessing, and controlling the risk that a borrower will fail to repay a loan. Credit risk management in the banking sector is important because of the Worldwide financial crisis experienced in recent years however, due to its greater influence on commercial banks financial performance, growth and survival. However, this is a feasible if they are able to make the required revenue to cover the cost of operations. The major proportion of the financial sectors total assets held by commercial bank in Nepal. Bessis (2011) examined some of the major risks that banks face as credit risk, liquidity risk, interest rate risk, mismatch risk, market liquidity risk, market risk, and foreign exchange risk. Credit risk is also a financial loss for commercial banks. The main purpose of the study is to investigate the impact of credit risk management on profitability of the commercial banks in Nepal. The profitability of the commercial banks is measured in terms of return on assets (ROA) and earnings per share (EPS). Dao and Nguyen (2020) investigate the various factors that impact the profitability of commercial banks in developing Asian countries, specifically Vietnam, Malaysia, and Thailand. The study examined three measures of profitability like return on assets (ROA), return on equity (ROE) and Tobin's Q and analyzes how they are affected by bank- specific factors. It includes capital adequacy ratio (CAR), non-performing loans (NPLs), cost to income ratio, liquidity ratio and bank size. Moreover, the author presents a controversial finding that suggests a negative relationship between CAR and profitability indicators, as well as a positive association between credit risks and profitability (Karki & Khadka, 2024). Kalwar and Shrestha (2024) revealed that credit risk management has a positive impact on the profitability of commercial banks in Nepal. Credit risk has vital impact on profitability of banks as it gives raise to non-performing loans. The study primarily focuses on analyzing the impacts of credit risk indicators on the profitability. This study helps to understand the interest income, cost of capital, minimizes the loan loss provisions and also reduction in NPLs. of commercial banks in Nepal. Previous research focused on credit deposit ratio, non-performing loan, capital adequacy ratio on profitability such as return on assets and earnings per share. Earlier studies included limited sample sizes. This study helps to fill the gap by using a sample of five randomly selected commercial banks using lottery method from the population of twenty commercial banks. Kithinji (2010) showed that there is an

indirect affiliation between non-performing loan and profitability of Nepali commercial banks. Mendoza and Rivera (2017) show that capital adequacy positively affects the profitability of rural banks in the Philippines. Marshal and Onyekachi (2014) investigated the effect of credit risk and bank performance in Nigeria for the period of 1997-2011 using the time series, cross sectional and panel data analysis. The conclusion of the study was that income is generated from loan and advances. Kurawa and Garba (2014) devoted effort to assess the effect of credit risk management on the profitability of Nigerian banks during the period 2002 to 2011. The findings of this study show that found that default rate, cost per loan assets and CAR has a significant positive impact on the profitability of Nigerian banks. Bhattarai (2016) investigate the effect of credit risk on the performance of Nepalese commercial banks. It includes capital adequacy ratio, non-performing loan ratio, cost per loan assets, cash reserve ratio and bank size as an independent variable, and return on assets as a dependent variable Yousuf and Felfoldi (2018) identified the effect of credit risk management on profitability in private banks in Syria. Nelson (2020) found that non-performing loan ratio (NPLR), the capital assets ratio (CAR) and the loan loss provision ratio (LLPR) are negatively significant impact on return on equity (ROE). However, CAR positively influences on return on assets (ROA) and the ratio of client loans and short-term financing (RCLSTF) positively influences on ROE. The hypotheses of this study have been tested.

H1: Credit deposit ratio has a significant positive influence on profitability of commercial banks

H2: Non-performing loan ratio has a significant negative impact on profitability of commercial banks

H3: Capital adequacy ratio has a significant negative influence on profitability of commercial banks.

Freeman (1984) states the stakeholder theory that groups or individuals are influence by the organization's objectives. Freeman redefines shareholders as group who are energetic to the survival and success of the company and assured the importance of considering stakeholders' perspective in management. The theory advocates that companies should not solely aim to maximize profits for shareholders however also take into account the influence of their actions on all stakeholders. According to the stakeholder theory, companies must adopt a long-term perspective when building relationships with stakeholders, acknowledging that positive relationships can enhance the company's long-term success. Soyemi et al. (2014) observed that the greater the risk, the higher the return. Risks are considered warranted when they are

understandable, measurable, controllable and within a banks capacity to willingly resist its adverse effect (NRB, 2010). Credit risk is an important type risk amongst the many types of risks that commercial banks face which influences bank performance (Boffey & Robson, 1995). In banking, credit risk affects the bank's profitability, liquidity position and cash flows factors that are identified as principal causes of bank failure and the greatest threat to the bank performance (Van Greuning & Brajovic-Bratanovic, 2009). In this research, Credit risk was measured by the capital adequacy ratio (CAR), and non-performing loans (NPLs), whereas profitability was measured by the ROE. Non-performing loans do not affect profitability (ROE). Serwadda (2018) investigated the entitle on the impact of credit risk management on the financial performance of commercial banks in Uganda. The results reveal that the performance of commercial banks is negatively affected by NPLs which expose them to high levels of illiquidity and financial crises in the banking industry.

Aduda and Gitonga (2011) analyzed data from 2000–2009 across 30 commercial banks. Using regression, they confirmed a statistically significant negative relationship between NPLR and ROE establishing that higher credit risk reduces profitability in Kenyan banks. Samuel (2015) examined five banks using NPL/loans and loans/deposits ratios against ROA through regression. The findings of this study have increased credit risk significantly diminished bank performance. Ebener and Omar (2016) found that while NPLR strongly negatively influenced ROE, total debt-to-assets and debt-to-equity ratios. Bhattarai (2016) studied capital adequacy, cost per loan assets, cash reserves, and bank size as independent factors with ROA. Results showed poor credit risk management, with NPLR low performance and cost per loan assets also negatively affecting ROA. However, CAR and cash reserves ratio were insignificant. Chhetri (2022) analyzed that NPLR has a negative, significant effect on ROA, while capital adequacy and bank size showed non-significant negative associations. Credit-to-deposit ratio was positive but insignificant, and management quality emerged as a positively significant factor. Pandey and Joshi (2023) examined that default rate and cost per loan assets negatively and significantly affect both ROA and ROE in Nepal, whereas capital adequacy ratio is positively and significantly related to performance. Amgain et al. (2025) revealed that non-performing loans(NPLs) have a significant adverse impact on ROA. Similarly , CAR exhibits a negative but statistically insignificant association with ROA . Furthermore, the cash reserve ratio(CRR) demonstrates that a positive insignificant relationship with ROA. Dahal and Dhungana(2025) found that commercial banks with higher CARs and larger asset sizes tend

to be more profitable. In addition to, an increase in non-performing loans has a significant negative effect on return on equity (ROE).

Methods of Data Collection and Analysis

This study was based on descriptive and casual research design. This study describes the credit risk management and profitability of commercial banks in Nepal. The descriptive research design was adopted for fact and figure finding and suitable information gathering fundamental issues related with credit risk on profitability of Nepali commercial banks. This study adopted causal research design to establish the cause-and-effect relationship between credit risk management and profitability. The causal research design examined the impact of credit risk on the profitability of commercial banks in Nepal. There are 20 commercial banks currently operating in Nepal as the population of the study (NRB, 2024). Due to limitations of time frame and resources, it is not feasible to include 20 commercial banks in the study. Therefore, Everest Bank Limited, Machhapuchchhre Bank Limited, Siddhartha Bank Limited, Prabhu Bank Limited, and Nabil Bank Limited were randomly selected through the lottery method from study period 2014/15 to 2023/24. The data are collected from the published annual reports of the sample commercial banks, the website of Nepal Rastra Bank (NRB) and other official websites. This study used secondary data sources as the primary instrument of data collection, including balance sheet and income statement. The descriptive statistics used mean, standard deviation, minimum and maximum values in this study. Furthermore, the variables study under profitability and the credit risk. Return on assets (ROA) and earnings per share (EPS) are considered as dependent variables. Meanwhile, the independent variables include credit deposit ratio (CDR), non- performing loan (NPLs), and capital adequacy ratio (CAR).

Model 1

In this model, the dependent variable is return on assets (ROA). Credit deposit ratio, non-performing loan, capital adequacy ratio are independent variables. The model is presented as follows:

$$ROA = \beta 0+\beta 1.CDR+\beta 2.NPL+\beta 3.CAR+\Sigma eit$$

Model

In this model, the dependent variable is earnings per share (EPS) whereas credit deposit ratio, non-performing loan, capital adequacy ratio are independent variables. The model is presented as follows:

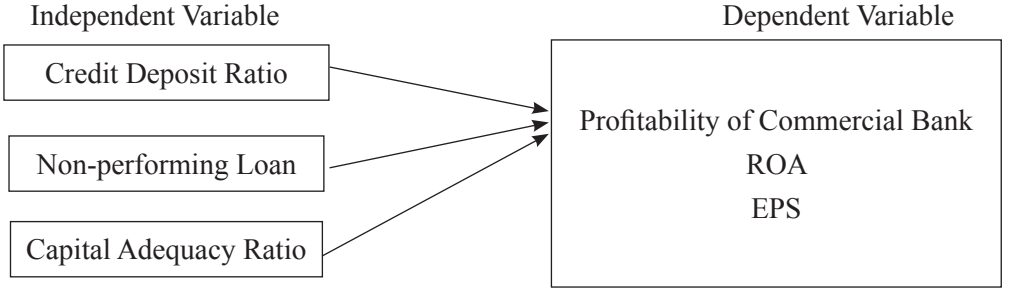
$EPS = \beta0+\beta1.CDR+\beta2.NPL+\beta3.CAR+\Sigma eit$

EPS = earnings per share, ROA =return on assets, CDR = credit deposit ratio, NPL = non-performing loan, CAR = capital adequacy ratio

$\beta0$ =The Intercept (constant), $\beta1$, $\beta2$, and $\beta3$ = the slope which represents the degree with bank performance changes as the independent variable changes by one-unit variable.

Σeit = error term

Conceptual Framework



Results and Discussion

The raw data collected were organized and processed using various financial and statistical tools to achieve the objective of the study. Data on RoA, EPS, CDR, NPLs and CAR of the five commercial banks were obtained from audited annual reports and used to conduct descriptive statistics, correlation analysis, and regression analysis.

Table 1

Financial Status of Everest Bank Limited

Year	ROA	EPS	CDR	NPL	CAR
2014/15	1.85	78.04	66.63	0.66	13.33
2015/16	1.59	40.33	75.14	0.38	12.66
2016/17	1.83	32.48	84.05	0.25	14.69
2017/18	1.97	32.78	81.86	0.2	14.2
2018/19	1.94	38.05	87.01	0.16	13.74
2019/20	1.42	29.71	83.52	0.22	13.38
2020/21	0.89	19.91	85.3	0.12	12.48

2021/22	1.13	26.3	90.77	0.12	11.89
2022/23	1.41	31.43	85.7	0.79	13.3
2023/24	1.36	31.47	81.12	0.71	12.3

Note: Annual Report of Everest Bank Limited

Table 1 illustrates that the data where ROA starts at 1.85 percent in 2014/15 after that it fluctuate and increase at 1.97 percent in 2017/18 again it decreases to 0.89 percent in 2020/21, after 2020/21 ROA recovers slightly. EPS starts high at 78.04 percent, then decrease significantly to 40.33 percent the next year, continues to decline to a low of 19.91 percent in 2020/21. CDR starts at 66.63 percent, increases to 90.77 percent in 2021/22, then decreases again. NPL starts at 0.66 percent, decreases to 0.12 percent, then increase to 0.79 percent in 2022/23. At first CAR starts with 13.33 percent then CAR fluctuates between 11.89 percent and 14.69 percent. The decrease in ROA and EPS together with increasing NPL suggests the existence of fundamental problems in loan management practices. The high CDR might be a strategy to increase profits, but it comes with higher risk, as seen in the increasing NPL. The CAR staying above 12 percent is a good sign that the bank is meeting regulatory requirements. In ten years, the NPL rate increased from 0.64 percent to 3.86 percent, and this would impact profitability which indicate high aggressive lending for profitability but risky. The strong CAR shows that despite the risk the bank is maintaining adequate capital reserves.

Table 2

Financial Status of Machhapuchchhre Bank Limited

Year	ROA	EPS	CDR	NPL	CAR
2014/15	1.26	22.2	78.77	0.64	12.24
2015/16	1.51	25.04	84.59	0.55	12.36
2016/17	1.89	24	88.47	0.38	16.82
2017/18	1.47	15.81	89.78	0.44	15.36
2018/19	1.61	21.07	87	0.37	12.79
2019/20	1.02	14.96	88.56	0.52	13.02
2020/21	1.02	17.76	86.53	0.62	12.06
2021/22	0.94	16.44	86.32	1.04	13.36
2022/23	0.87	15.85	81.35	2.26	13.58
2023/24	0.55	8.99	83.32	3.86	13.74

Note: Annual Report of Machhapuchchhre Bank Limited

Table 2 demonstrates that the data over the ten-year period where ROA starts at 1.26 percent in 2014/15, and increase in 2016/17 at 1.89 percent fluctuates and declines to 0.55

percent by 2023/24. EPS follows a similar pattern, increasing at 25.04 percent in 2015/16 and then decrease at 8.99 percent in 2023/24. CDR remains relatively high, mostly in the 2017/18 at 89.78 suggests the bank is lending out a significant portion of its deposits. However, the NPL increases unexpectedly from 0.64 percent to 3.86 percent. CAR fluctuates but stays above 12 percent, which is generally considered the minimum requirement. For instance, as NPL increases, ROA and EPS decrease. The CDR is high, which could mean that the bank is taking more risk by lending out most of its deposits, which might explain the rise in NPL. CAR remains stable, which is good because it means the bank is maintaining a place on top of minimum capital requirements to enhance banks strength against potential losses. The high CDR might be a strategy to increase profits, but it comes with higher risk, as seen in the increasing NPL. The CAR staying above 12 percent is a good sign that the bank is meeting regulatory requirements.

Table 3

Financial Status of Nabil Bank Limited

Year	ROA	EPS	CDR	NPL	CAR
2014/15	2.06	57.24	64.43	1.82	11.57
2015/16	2.32	59.27	70.49	1.14	11.73
2016/17	2.69	59.86	65.38	0.8	12.9
2017/18	2.61	51.84	82.66	0.55	13
2018/19	2.11	50.57	81.96	0.74	12.5
2019/20	1.58	36.16	79.72	0.98	13.07
2020/21	1.71	33.57	89.84	0.84	12.77
2021/22	1.2	18.64	92.49	1.62	13.09
2022/23	1.42	23.67	84.19	3.39	12.54
2023/24	1.19	22.9	83.6	4.45	12.24

Note: Annual Report of Nabil Bank Limited

Table 3 reveled the ROA which starts at 2.06 percent in 2014/15, and increase in 2016/17 with 2.69 percent, then decrease in 2023/24 with 1.19 percent. So, there's a downward trend after 2016/17, which might indicate decreasing profitability over time. The EPS starts strong at 57.24 percent in 2014/15, and increase the next year, then starts to decline with low of 18.64 percent in 2021/22 before nearly recovering. A higher CDR means the bank is lending more, which can be good for profitability but risky if too high. The CDR starts at 64.43 percent, and increase in 2021/22 at 92.49 percent, then decreases. The increasing trend until 2021/22 suggests the bank was expanding its lending, but later it decreases. Lower NPL is better. Higher

CAR indicates better strength. The CAR starts at 11.57 percent, increases to 13.09 percent in 2021/22, then slightly decreasing.

Table 4

Financial Status of Prabhu Bank Limited

Year	ROA	EPS	CDR	NPL	CAR
2014/15	2.19	31.73	70.43	7.33	10.61
2015/16	1.64	26.75	79.11	8.83	12.29
2016/17	1.76	27.17	76.19	4.55	11.18
2017/18	0.86	12.58	81.04	3.98	11.86
2018/19	1.29	21.03	87.94	3.76	11.16
2019/20	0.71	11.58	78.26	3.15	11.18
2020/21	0.8	13.54	83.95	1.68	13.1
2021/22	0.82	14.97	81.38	1.86	12.86
2022/23	0.08	1.19	81	4.98	11.87
2023/24	0.14	2.17	75.56	4.94	12.37

Note: Annual Report of Prabhu Bank Limited

Table 4 illustrates that the ROA measures how profitable the bank is relative to its total assets. Starting at 2.19 percent in 2014/15, it drops to 1.64 percent the next year, then fluctuates. It starts high at 31.73 percent, then decreases with a low of 1.19 percent in 2022/23 and slowly increase in 2023/24 at 2.17 percent. CDR measures how much of the bank's deposits are given out as loans. A higher ratio could mean more risk. The CDR starts at 70.43 percent and increases at 87.94 percent in 2018/19. After that, it fluctuates but remains mostly above 75 percent. NPL indicates the percentage of loans that are not being repaid. Lower NPL is better. The NPL starts at 7.33 percent, and increase at 8.83 percent in 2015/16, after that it decreases by 1.68 percent by 2020/21. However, in the last two years, it jumps to around 4.94-4.98 percent. CAR starts at 10.61 percent, which is just above the regulatory minimum (usually around 10-11percent). It increases at 13.1 percent in 2020/21 but then decreases to around 11.87-12.37 percent in the last two years. The bank seems to maintain CAR above required levels, but in 2022/23 to 11.87 percent might indicate increased risk or lower capital reserves. The increase in NPL towards the end could indicate get worse loan quality. High CDR suggests aggressive lending, which might have led to higher NPL later. The CAR remains adequate but shows some volatility. The bank might need to focus on improving asset quality and managing credit risk to stabilize profitability. The bank seems to maintain CAR above required levels, but in 2022/23 to 11.87

percent might indicate increased risk or lower capital reserves. The bank's CAR has remained above the regulatory minimum of 8 percent.

Table 5

Financial Status of Sidhartha Bank Limited

Year	ROA	EPS	CDR	NPL	CAR
2014/15	1.51	37.77	83.04	1.8	11.1
2015/16	1.69	41.53	87.02	1.47	11.25
2016/17	1.53	26.6	88.4	1.3	12.74
2017/18	1.59	26.45	86.08	1.09	12.12
2018/19	1.49	23.07	89.65	0.75	12.7
2019/20	1.26	19.55	89.04	1.38	13.17
2020/21	1.25	22.79	90.6	1	13.36
2021/22	1.1	20.6	96.08	1.07	13
2022/23	1.15	22.48	84.94	2.01	12.47
2023/24	1.06	21.86	84.63	2.17	11.88

Note: Annual Report of Sidhartha Bank Limited

Table 5 illustrates that the ROA starts at 1.51percent in 2014/15, and increase at 1.69 in 2015/16, then fluctuates but generally trends downward to 1.06 by 2023/24. EPS starts at 37.77 percent and increases at 41.53 the next year again it decreases at 26.6 percent and continues to decline to 21.86. CDR starts at 83.04 percent and increases to 96.08 in 2021/22, then decrease again. A higher CDR means the bank is lending out more of its deposits. The highest CDR is 96.08 percent in 2021/22, which is quite high. High CDR can indicate that the bank is using its deposits effectively, but it might also mean higher risk if loans aren't repaid. NPL starts at 1.8 percent and decreases to 0.75 percent and then increases again to 2.17 percent. CAR starts at 11.1 percent, generally increases to 13.36 percent, then slightly decreases.

Table 6

Descriptive Statistics of Sampled Commercial Banks

Variables	N	Mean	Standard Deviation	Minimum	Maximum
ROA	50	1.41	0.54	0.08	2.69
EPS	50	27.64	15.04	1.19	78.04
CDR	50	82.90	6.79	64.43	96.08
NPL	50	1.79	1.89	0.12	8.83
CAR	50	12.70	1.10	10.61	16.82

Note: Annual Reports of Sampled Banks (2014/15-2023/24)

Table 6 illustrates that mean, standard deviation, minimum and maximum values variables associated with five sample commercial banks for the period 2014/15 to 2023/24.

The average return on assets (ROA)of the sampled commercial banks is 1.41 percent with a minimum value of 0.08 percent to a maximum value of 2.69 percent indicating the low performance of the selected commercial bank. Earnings per share (EPS) has a minimum value of 1.19 percent and maximum value of 78.04 percent with an average value of 27.64 percent, which indicate growth trend of the selected commercial banks. Credit deposit ratio (CDR) ranges from a minimum of 64.43 percent to maximum of 96.08 percent with an average value of 82.90 percent. Similarly, the minimum value of non-performing loan (NPLs) is 0.12 percent to maximum value of 8.83 percent with an average value of 1.79 percent. Likewise, the minimum value of capital adequacy ratio (CAR) is 10.61 percent to maximum value of 16.82 percent with average value leading by 12.70 percent. Standard deviation of ROA and EPS are 0.54 and 15.04 respectively which show that ROA is better than EPS.

Table 7

Relationship Between Credit Risk Variables and ROA

	ROA	CDR	NPL	CAR
ROA	1.00			
CDR	-0.33*	1.00		
NPL	-0.25**	-0.29*	1.00	
CAR	0.09*	0.31*	-0.44**	1.00

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

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

Note: Authors Calculation

Table 7 demonstrates that there is a moderate negative relationship between return on assets and credit deposit ratio at a significant at 0.05 level which means that as the CDR increases, ROA tends to decrease. The relationship of NPL with ROA is negative but not statistically significant which means that a rise in bad loans is associated with reduced profitability of commercial banks. The relationship between CAR and ROA indicates that there is a weak positive correlation and not significant with 0.01 or 0.05 level which suggest that capital strength alone does not directly influence short term profitability.

Table 8

Relationship Between Credit Risk Variables and EPS

	EPS	CDR	NPL	CAR
EPS	1.00			
CDR	-0.53**	1.00		
NPL	-0.30*	-0.29*	1.00	
CAR	-0.05*	0.31*	-0.44**	1.00

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

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

Note: Authors Calculation

Table 8 revealed that credit deposit ratio has a negative significant relationship with earnings per share at 0.01 level of significance which indicate that CDR are associated with lower EPS and non-performing loan ratio also shows moderate negative relationship with earning per share at 0.05 level of significance which suggests that an increase in non-perming loan is also associated with lower EPS. Similarly, capital adequacy ratio is also a weak negative and insignificant relationship with earnings per share which suggest that capital adequacy has limited direct influence on EPS.

Table 9

Regression Analysis of Credit Risk Variables on ROA of Sampled Commercial Banks

Specification	Coefficients	Standard Error	t Stat	P-value	VIF
Intercept	4.09	1.19	3.44	.000	
CDR	-0.04	0.01	-3.24	.000	1.40
NPL	-0.10	0.04	-2.35	.020	1.28
CAR	0.04	0.07	0.48	.630	1.30

R-square = 23.57%, adjusted R- square = 18.59% and F (3, 46) = 4.729 at level of significance 5%

Note: Authors Calculation

Table 9 illustrates that 23.57 percent of the dependent variable variance according to its R-squared value. The adjusted R-squared value of 0.1859 takes into consideration the number of predictors which results in a modest decrease in model explanatory power. The reported F-statistic value of 4.729 together with a p-value of 0.0059 indicates model significance at the 5 percent. The intercept coefficient value is 4.09 and standard error 1.19 whereas t stat is 3.44 and p-value is .000 However, the intercept is statistically significant ($p < 0.05$), indicating that when all independent variables are zero, the ROA is expected to be approximately 4.09. The CDR coefficient is -0.04, standard error is 0.01, t stat is -3.24, P-value is 0.00. The negative coefficient suggests that an increase in the CDR is associated with a decrease in ROA. This effect is statistically significant ($p < 0.05$) and VIF value is 1.40 which is less than 10 so there is no problem of multicollinearity. In NPL coefficient is -0.10, standard error is 0.04, t stat is -2.35, P value is 0.020 and VIF value is 1.28 which is less than 10 so there is no problem of multicollinearity. Similar to CDR, the negative coefficient indicates that an increase in NPL is associated with a decrease in ROA, and this effect is also statistically significant ($p < 0.05$). In CAR coefficient is 0.04, standard error is 0.07, t stat is 0.48, P-value is 0.63 and VIF value is

1.30 which is less than 10 so there is no problem of multicollinearity. The coefficient for CAR is not statistically significant ($p > 0.05$).

Table 10

Regression Analysis of Credit Risk Variables on EPS of Sampled Commercial Banks

Specification	Coefficients	Standard Error	t Stat	P-value	VIF
Intercept	170.31	26.39	6.45	.000	
CDR	-1.46	0.24	-5.99	.000	2.03
NPL	-4.16	0.93	-4.47	.000	1.84
CAR	-1.12	1.61	-0.70	.490	1.31

R-square = 51.11%, adjusted R- square = 47.95% and F (3, 46) = 16.043 at level of significance 5%

Table 10 illustrates that 51.11 percent for R-squared demonstrates that the model accounts for 51.11 percent of the EPS variation. The adjusted R-squared value at 47.95 percent indicates some reduction in model explanatory strength caused by additional predictors. The F-statistic value of 16.043 established statistical model significance at the 5 percent significance level with its corresponding p-value being below 0.05. The intercept coefficient value is 170.31, standard error 26.39 whereas t stat is 6.45 and p-value is .000. However, the intercept is statistically significant ($p < 0.05$), indicating that when all independent variables are zero, the EPS is expected to be approximately 170.31. The CDR coefficient value is -1.46, standard error 0.24, t stat -5.99, p-value is .000 and VIF is 2.03 which is less than 10 so there is no problem of multicollinearity. The negative coefficient suggest that an increase in the CDR is associated with a decrease in EPS. This effect is statistically significant ($p < 0.05$). The NPL coefficient value is -4.16, standard error 0.93, p value is 0.00 suggests statistical significance and VIF is 1.84 which is less than 10 so there is no problem of multicollinearity. In CAR coefficient is -1.12, standard error is 1.61, t Stat is -0.70, p-value is 0.49 much larger and VIF is 1.31 which is less than 10 so there is no problem of multicollinearity. As a result, CAR is not statistically significant.

The findings of this study indicate that credit risk management influences on profitability of commercial banks in Nepal. This study illustrated the association among return on assets, earnings per share and other components of credit risk management, like CDR, NPL and CAR. Therefore, Nepali commercial banks should enhance their ability to manage credit risk and assets efficiently and effectively. The study shows that a negative relationship with credit risk management and profitability and also low level of relationship which is not significant relationship. In this study, H1 is not supported due to the negative correlations of credit deposit

ratio with ROA and EPS. H2 is supported due to non-performing loan ratio negatively effect on return on assets and earnings per share. H3 is not supported capital adequacy ratio has no substantial impact on ROA and EPS. The findings show a negative relationship between the credit deposits ratio and non-performing loans with both return on assets (ROA) and earnings per share (EPS). However, the capital adequacy ratio does not have impact on either return on assets and earnings per share. Specifically, the study revealed that credit risk management influence on profitability of commercial banks in Nepal. The credit deposit ratio is negatively affecting on the profitability of commercial banks in Nepal. The results are consistent with findings (Samuel, 2015) which go against H1. The results are opposite to the Chhetri (2022) showed that the credit deposit ratio positively impact on bank profitability. As expected from earlier analysis, non-performing loans are negatively affecting the profitability of commercial banks. The study data showed non-performing loans create extensive damage to credit risk levels that ultimately reduce profitability for commercial banks in Nepal. The finding is similar to (Aduda & Gitonga 2011; Bhattarai 2014; Ebener & Omar, 2016) which is s supported to H2. This demonstrates that commercial banks in Nepal have effective methods for evaluating credit risk management. The findings show that non-performing loans (NPL) in Nepali commercial banks lead to decreased loan repayments. Higher default rates along with reduced banking-sector income and investment funding negatively affect bank profitability. Furthermore, they should improve their loan management and credit analysis. The interaction between profitability and capital adequacy ratio is positive in ROA and negative in EPS which shows that low level of relationship and it is not significant relationship. The result is consistence with the result of (Nelson, 2020). The results go against those of (Abiola & Olausi, 2014) who found that capital adequacy ratio is positive impact on profitability of commercial bank in Nigeria which is against H3**.**

Conclusion

The research indicates that a Nepali commercial bank's credit risk and profitability can be evaluated using return on assets (ROA) and earnings per share (EPS). The entire analysis of these variables indicates a good status of profitability for the commercial banks in the study. The banks are effectively generating profits through positive financial results supported by control of their non-performing loans and stable capital adequacy ratio. The CDR figure stands at a reasonable level even though it is not exceptionally low and the banks manage to operate efficiently under their sector's standards. The banks analyzed in this study show a

prosperous profit-making state through skillful asset management along with solid earnings and appropriate capital reserves which positions them for successful future growth and stability. The credit position of commercial banks, particularly through the lenses of cost management and asset quality, plays a vital role in determining profitability. Minimizing non-performing loans along with effective cost management represents essential bank strategies for improving financial results and shareholders value. Based on this study, it is clear that both CDR and NPL are significant influencing factors on the profitability of banks, as measured by both ROA and EPS. Commercial banks showing higher CDR values record lower ROA and EPS because their operational expenses exceed their revenue stream. The declining profitability of banks derives from increased non-performing loans because it lowers both EPS and ROA. This demonstrates that strong asset quality remains essential for profitability. While CAR is a critical measure for the stability and risk management of banks, it does not show a significant impact on profitability. Commercial banks can increase their profitability by effectively managing operational costs and minimizing non-performing loans. As a result, the implications for improving bank management practices and increasing bank profitability are suggested. The study demonstrates banks must consider strategies for improving lending processes require banks to develop better credit assessment techniques. The results shows that banks have low level non-performing loans, which motivate credit quality. Banks need to create a proactive lending approach despite managing non-performing loan levels to maintain sustainable growth. Reevaluation of credit policies should be done to enact a restricted lending growth strategy alongside responsible risk administration. The study leads the management of commercial banks to reflect on their past actions and indicate how to formulate future strategies and programs for addressing current issues on credit risk management. Future research direction could be taking moderating variable such as size of the bank to define the impact of credit risk management on profitability of commercial bank in Nepal.

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