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Capital Adequacy and its Influence on Bank Profitability in Nepal

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ABSTRACT

Background: Capital is a fundamental component for any organization's existence and operation. It serves as the lifeblood for initiating and sustaining businesses, regardless of their scale. The purpose of the research is to evaluate the financial performance of Nepalese commercial banks' capital adequacy ratios. Considering the performance of Nepalese commercial banks, it explicitly investigates the impact of capital adequacy ratio, cost income ratio, debt to equity ratio, equity capital to assets, bank size, and liquid ratio.

Methods: This study investigates the impact of capital adequacy on the profitability of commercial banks in Nepal, utilizing secondary data from all commercial banks spanning 2013 to 2022. Analyzing 20 commercial banks, the research reveals that Nepalese commercial banks, on average, generate a respectable profit with typical return variance. The Capital Adequacy Ratio (CAR) consistently surpasses the 10% regulatory threshold, ensuring compliance with Basel III requirements and NRB directives.

Results: The Average Assets Ratio (AAR) signifies a proactive approach to lending, contributing to enhanced profitability, while the Government Securities to Total Investment Ratio (G-STIR) indicates risk-averse practices with investments in risk-free assets. The Non-Performing Loans Ratio (NPLR) reflects the challenge of balancing low returns and high risk associated with non-performing loans. Correlation coefficients reveal complex relationships, indicating that increased capital, debt, and non-performing loans may lead to reduced profitability for Nepalese commercial banks. Regression analysis reinforces these findings, highlighting significantly negative correlations between Return on Assets (ROA), Return on Equity (ROE), and spread with capital adequacy determinants, and a positively insignificant relationship between government securities, total investment, and profitability metrics.

Conclusions: The study explored capital adequacy determinants (CAR, D-ER, AAR, G-STIR, NPLR) and their impact on bank profitability in Nepal. CAR had no significant effect on ROA, exhibiting a negative correlation. Conversely, D-ER and Advances-to-Assets Ratio positively influenced ROA. G-STIR showed a positive relationship without significance, while NPLR had a significantly negative impact. Non-risk-weighted measures, particularly debt-equity, negatively affected profitability. The study highlighted the limited impact, suggesting a more nuanced capital management approach, emphasizing D-ER and Advances-to-Assets Ratio. Consideration of macroeconomic factors and a balanced capital structure are crucial for commercial banks in Nepal.

Keywords: capital adequacy; return on assets; spread rate; return on equity; debt to equity ratio; nepalese commercial banks.

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INTRODUCTION

Capital is a fundamental component for any organization's existence and operation. It serves as the lifeblood for initiating and sustaining businesses, regardless of their scale. Organizations begin with zero capital and rely on contributions from owners, shareholders, or promoters to become operational. Adequate funding is vital for every entity, and banks, as primary capital sources, must ensure sufficient capital to protect depositors' interests. Research indicates an inverse relationship between Return on Assets (ROA) and Earnings Per Share (EPS) with the Debt/Equity ratio in the capital

structure of commercial banks in Nepal.⁴ Capital adequacy emerges as a crucial factor, ensuring banks can withstand unforeseen losses and safeguard depositors from various risks.⁵ The banking sector plays a pivotal role in Nepal's economy, contributing significantly to economic activities, stock market dominance, and tax revenues. Nepal Rastra Bank (NRB) regulates commercial banks, setting minimum capital requirements to protect depositors' interests.⁶ The Basel III reforms, implemented globally, aim to strengthen financial institutions' stress resistance through enhanced capital quality and levels. By July 2023, commercial banks in Nepal adhering to Basel

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II guidelines must adopt recommended techniques.⁷ The Basel III reforms focus on macro-prudential supervision, introducing measures like capital conservation and countercyclical buffers. These global standards, integral to regulatory capital requirements. emphasize the importance of funds in ensuring banking system soundness.8 Nepalese banks, relying heavily on borrowed funds, face a growing trend that warrants further analysis for its impact on financial stability and performance. The research on Nepalese commercial banks' financial performance evaluates capital adequacy ratios, cost-income ratios, debtto-equity ratios, equity capital to assets, bank size, and liquid ratios. Inconsistencies in existing studies highlight the need for a comprehensive understanding of the intricate relationship between capital adequacy and bank performance in Nepal.8 The purpose of the research is to evaluate the financial performance of Nepalese commercial banks' capital adequacy ratios. Considering the performance of Nepalese commercial banks, it explicitly investigates the impact of capital adequacy ratio, cost income ratio, debt to equity ratio, equity capital to assets, bank size, and liquid ratio.

METHODS

In order to investigate the effect of capital adequacy on the profitability of commercial banks in the case of Nepal from the fiscal years 2012/13 to 2021/22, this study employs a descriptive as well as analytical research design. The descriptive technique of research methodology involves evaluating data and facts and aids in describing all the characteristics of variables. In descriptive research, a subject is defined by creating an outline of individuals, teams, or events through tabulation and the gathering of information on the frequency of the variables being examined. Regression analysis and other analytical techniques are used to analyze the state of commercial banks. The basis of the research is secondary data that was collected from 20 Nepalese commercial banks between the years of 2012-13 and 2021-22, obtaining a total of 200 observations. The information is gathered from a number of issues of Banking and Financial Statistics, Banking Directives released by Nepal Rastra Bank,

and annual reports of Nepal's commercial banks. Although the numerous elements that affect a bank's profitability have been researched in the past, little is known about how the capital adequacy ratio affects the profitability of private sector banks. The study's population consist of 20 commercial banks. The study is based on a ten-year period of quantitative data from the sample units. Calculated data are gathered from secondary sources, the primary sources of which are annual reports of banks. The individual commercial banks' websites are where the annual reports are pulled from. Information is gathered not only from the annual reports of the sample banks but also from the NEPSE and NRB websites as well as from other publications of the Nepal Stock Exchange (NEPSE). The model developed in this study makes the sampling-based assumption that it is possible to determine the profitability of Nepalese commercial banks based on their capital sufficiency, debt-to-equity ratio, loans and advances, government securities, and non-performing loans. To access the profitability performance of the bank from 2012/13-2021/22 a multiple regression equation is given below:

ROA = a + b1 (CRAR) + b2 (DER) + b3 (AAR) + b4(GSTI) + b5 (NPLR) + e

ROE = a + b1 (CRAR) + b2 (DER) + b3 (AAR) + b4(GSTI) +b5 (NPLR) + e

SR = a + b1 (CRAR) + b2 (DER) + b3 (AAR) + b4 (GSTI) + b5 (NPLR) + e

PR= a + b1 (CRAR) + b2 (DER) + b3 (AAR) + b4 (GSTI) +b5 (NPLR) + e

In this analysis, the researchers have used 5% level of significance to test the Hypothesis.

Whereas,

PR= Average Profitability ratio

S= Spread Rate

CRAR= Capital to risk-weighted asset ratios

DER= Debt-Equity ratio

AAR= Advance to assets ratio.

GSTI= Government securities to total investment ratio

NPLR= Non performing loan ratio

E = Random Error term

RESULTS

This section of the research focuses on the research's analysis with results and findings based on the different statistical tools. The findings were created with specific objectives and research questions collected from the literature review. Table 1 shows the descriptive statistics of dependent and independent variables during the period 2012/13 to 2021/2022.

The study focuses on key financial ratios of sample banks in Nepal, emphasizing the significance of capital adequacy, debt-to-equity, advances to total assets, government securities to total investment, and non-performing loans ratios. The capital adequacy

Table 1. Descriptive statistics of variables.						
Variables AVG SD MIN MAX I						
Independent Variables						
CAR	12.36	3.4637	5.56	17.16	210	
D-ER	10.8693	3.4732	2.323	14.61	210	
AAR	69.36	4.571	40.66	86.93	210	
G-STIR	66.36	5.3623	40.36	99.06	210	
NPLR	3.256	8.7632	0.93	26.63	210	
Dependent Variables						
ROA	2.036	1.5612	0.263	14.16	210	
ROE	20.23	11.341	3.14	68.89	210	
SR	2.369	1.3011	0.45	6.36	210	
Dependent Variables						
Mean Profitability Ratio	7.89	4.561	0.56	25.36	210	

ratio, a crucial measure to safeguard deposit funds, exhibits an average value of 12.36%, surpassing both Basel Committee and Nepal Rastra Bank's minimum requirements, indicating the banks' capability to absorb losses from credit risk. The debt-to-equity ratio, indicative of long-term viability, averages 10.87%, portraying the relationship between debt and equity, while the advances to total assets ratio, reflecting lending aggressiveness, averages 69.36%, contributing to profitability. The government securities to total investment ratio, a marker for risk-taking capacity, averages 66.36%, indicating the banks' strategy in balancing profit and risk. The non-performing loans ratio, showing the debtor's risk of loan repayment, averages 3.256%, with notable fluctuations between the highest (26.63%) and minimum (0.93%) values over the past decade. These ratios collectively provide insights into the financial health and risk management strategies of commercial banks in Nepal.

The Pearson correlation coefficients are computed and the results are presented in (Table 2).

Table 2. Pearson correlation matrix.						
Variables Correlation ROA p-value						
CAR	Pearson's correlation	-0.38	0.774			
D-ER	Pearson's correlation	-0.348**	0.006**			
AAR	Pearson's correlation	-0.171	0.005			
G-STI	Pearson's correlation	0.05	0.704			
NPLR	Pearson's correlation	0.022	0.056			

** Correlation is significant at 0.01 level (2-tailed), *Correlation is significant at 0.05 level (2-tailed).

The inverse correlation between ROA and CAR can be shown in Table 2 where the correlation coefficient between ROA and CAR is -0.38. Since the correlation coefficient between ROA and D-E R is -0.348, it can be concluded that the two variables do not interact favorably. Assets to Advances Ratio (AAR) and Return on Assets (ROA) have a correlation coefficient of -0.171, indicating an unfavorable relationship between the two metrics. Government securities to total investment ratio (G-STIR) and return on assets (ROA) have a correlation coefficient of 0.050, indicating a favorable link between the two variables. Since the correlation between ROA and non-performing loan ratio is 0.022, there is positive relationship a between the two variables.

Table 3. Correlation Analysis between ROE and Explanatory Variables.						
Variables	Correlation	ROE	p-value			
CAR	Pearson's correlation	-0.36	0.785			
D-ER	Pearson's correlation	-0.07	0.597			
AAR	Pearson's correlation	-0.19	0.157			
G-STI	Pearson's correlation	0.009	0.943			
NPLR	Pearson's correlation	-0.09	0.473			

^{**} Correlation is significant at 0.01 level (2-tailed), *Correlation is significant at 0.05 level (2 tailed)

According to Table 3, there is a negative link between ROE and CAR. The correlation coefficient between ROE and Debt-Equity ratio (D-ER) is -0.07, while the correlation coefficient between ROE and CAR is -0.36. Given that ROE and AAR have a correlation coefficient of -0.185, there is a clear inverse association between the two. The ROE and G-STIR correlation value is 0.009, indicating a strong positive association

between the two variables. There is a negative relationship between ROE and NPLR, with a -0.094 correlation coefficient between the two variables.

Table 4. Correlation analysis between spread rate and explanatory variables.						
Variables	Variables Correlation Spread Sig(p)					
CAR	Pearson's correlation	-0.095	0.47			
D-ER	Pearson's correlation	-0.226	0.08			
AAR	Pearson's correlation	-0.146	0.26			
G-STI	Pearson's correlation	0.045	0.74			
NPLR	Pearson's correlation	-0.24	0.05			

^{**} Correlation is significant at 0.01 level (2-tailed), *Correlation is significant at 0.05 level (2-tailed).

According to Table 4, there is a negative association between Spread rate and CAR, as seen by the -0.095 correlation coefficient between the two variables. The correlation coefficient between Spread and D-ER is -0.226, indicating a poor link between the two. According to the -0.146 correlation coefficient between Spread and AAR, there is no positive link between the two metrics. The correlation coefficient between Spread and G-STIR is 0.045, indicating that there is a direct association between the two variables. The correlation coefficient between Spread and NPLR is -0.240, demonstrating the strong inverse association between the two variables.

Table 5. Correlation Analysis between Average Profitability ratio and Explanatory variables.					
Variables	Correlation	Average Profitability ratio	p-value		
CAR	Pearson's correlation	-0.043	0.743		
D-ER	Pearson's correlation	-0.133	0.31		
AAR	Pearson's correlation	-0.189	0.148		
G-STI	Pearson's correlation	0.02	0.881		
NPLR	Pearson's correlation	-0.133	0.31		

^{**} Correlation is significant at 0.01 level (2-tailed), *Correlation is significant at 0.05 level (2-tailed).

With reference to Table 5, we can see that there is a negative relationship between the average profitability ratio and CAR, with a correlation coefficient of -0.043. Average profitability ratio and DER have a -0.133 correlation coefficient, which indicates a negative link between them. Average profitability and AAR have a -0.189 correlation coefficient, which indicates a negative link between

the two variables. The average profitability ratio and G-STIR have a substantial positive correlation of 0.020, which shows a meaningful association. Additionally, there is a negative association between the Average Profitability Ratio and NPLR, as seen by the correlation coefficient of -0.133 between the two variables

Regression Analysis

In this method, we've used a variety of models to calculate the qualitative impact of the capital adequacy ratio, the debt-to-equity ratio, the advance assets ratio, the government securities to total investment ratio, and the non-performing loan ratio on the profitability of Nepalese commercial banks as measured by the ROA, ROE, Spread, and the average profitability ratio. Here, Model 1 illustrates the connection between ROA and explanatory factors. Model 2 shows how ROE and the explanatory factors are related. Model 3 shows the correlation between the spread rate and explanatory variables, while Model 4 shows the correlation between the average profitability ratio and explanatory connection.

Regression result:

Model 1 Regression result:

The capital adequacy variables' regression results and their effects on the ROA of Nepalese commercial banks are shown in Table 6. F appears to have a calculated value that is higher than its significant value. In other words, the estimated significance value, which is 0.038, is lower than the anticipated significance value, which is 0.005. This indicates that regression model 1's explanatory variables are important for demonstrating the impact on the profitability of Nepalese commercial banks. The regression model's explanatory variables all have acceptable R2 values of 0.191. This demonstrates that independent variables account for 19.10% of the variation in the dependent variable Return on Assets and that other variables account for the remaining 80.90% of the variation in ROA. CAR has a P value of 0.859, which is greater than 0.05, and a beta of -0.005. It demonstrates that CAR and ROA have a bad

but statistically insignificant association. Empirical studies on the connection among commercial banks' financial performance and their capital adequacy ratio. The beta coefficient for the equity ratio is negative, indicating a negative correlation between D-ER and ROA. The P value is 0.010, which is less than 0.05, indicating a statistically significant negative relationship between the Debt-Equity ratio and ROA. Therefore, when the D-E ratio increases/decreases, ROA also decreases/increases inversely, indicating a relationship between the two. The advance-to-assets ratio has a negative beta coefficient. It demonstrates

on equity (ROE) of Nepalese commercial banks are presented in Table 7. The calculated F value is higher than the significance value, indicating that the explanatory variables in regression model 2 are not significant in explaining the impact on the profitability of Nepalese commercial banks. Specifically, the significance value of 0.723 is greater than the expected significance value of 0.005. The regression model's overall explanatory indicator has an adequate R2 of 0.050. This shows that other variables account for the remaining 95.00% of the variation in the dependent variable, returns on equity, and that independent

Table 6. Regression analysis between ROA and explanatory variables.							
Model	Unstandar	dized coefficients	Standardized Coefficients	Т	p-value		
Model	В	Std. Error	Beta	1			
Constant	11.628	3.984		2.919	0.005		
CAR	-0.005	0.099	-0.006	-0.48	0.859		
D-ER	-0.333	0.128	-0.483	-0.2599	0.01		
AAR	-0.105	0.049	-0.295	-2.139	0.037		
G-STIR	0.008	0.013	0.095	0.655	0.5		
NPLR	-0.047	0.061	-0.144	-0.769	0.043		
$R^2 = 0.191$ A	$R^2 = 0.191$ Adj. $R2 = 0.116$ $F = 2.556$ p-value = 0.038a						

ROA=11.628-0.005CAR-0.333D-ER-0.105AAR+0.008G-STIR-0.047+E

that there is a bad correlation between ROA and AAR. The P value, which is less than 0.05, is 0.037. It demonstrates that AAR and ROA have a negative but statistically significant association. It implies that AAR and ROA have a favorable relationship. Government securities' beta coefficient in relation to total investment is positive. This suggests a favorable correlation between the G-STIR and ROA. The P value, which is greater than 0.05, is 0.500. It demonstrates that G-STIR and ROA have a positive but insignificant statistical relationship. In contrast, the non-performing loan ratio has a negative beta coefficient. It shows that NPLR and ROA have a bad relationship. The P value, which is less than 0.05, is 0.043. It demonstrates that NPLR and ROA have a bad and statistically significant association. The best indicator of bank profitability, in the opinion of several regulatory bodies, is ROA (Hassan and Bashir, 2003).

Regression Result of Model 2

The findings of the regression analysis on the relationship between capital adequacy and the return

variables only account for 5.00% of that variation. Table 7's findings show that the capital adequacy ratio (CAR) has a negative beta value of -0.031. When compared to 0.005, the P value of 0.810 is more significant. It shows that CAR and ROE have a bad but statistically negligible association.

The debt-to-equity ratio has a negative beta coefficient. It demonstrates the inverse correlation between D-ER and ROE. More significant than 0.05 is the P value, which is 0.675. It suggests that DER and ROE have a bad but statistically negligible association. The advances to assets ratio's beta coefficient is -0.384. It demonstrates the inverse correlation between AAR and ROE. The P value, which is less than 0.005, is 0.037. It suggests that AAR and ROE have a bad and statistically significant association. Government securities' beta coefficient in relation to all investments is 0.036. It demonstrates a favorable correlation between G-STIR and ROE. P is greater than 0.05, thus. It shows that GSTIR and ROE have a favorable but statistically insignificant relationship. The non-

Table: 7 Regression Analysis between ROE and Explanatory Variables.							
Model	Unstandardized coeffic	eients	Standardized Coefficients	Т	p-value		
	В	Std. Error	<u> </u>		•		
Constant	44.22	20.717		2.134	0.037		
CAR	-0.031	0.514	-0.09	-0.061	0.81		
D-ER	-0.281	0.666	-0.085	-0.421	0.675		
AAR	-0.384	0.254	-0.226	-1.511	0.017		
G-STIR	0.036	0.067	0.084	0.531	0.598		
NPLR	-0.021	0.316	0.014	0.067	0.892		
R ² =0.050 Adj	R ² =0.050 Adj. R ² = -0.38, F= 0.570 p-value=0.723						

performing loan ratio has a beta coefficient of 0.021. It demonstrates the strong correlation between NPLR and ROE. The P value, which is greater than 0.05, is 0.947. It shows that ROE and NPLR have a positive but statistically insignificant relationship.

Regression Result Model-3

The regression findings of the variables of capital adequacy and their effect on the spread of Nepalese commercial banks are shown in Table 8. It looks that the estimated F value is higher than the relevant value. In other words, the estimated significance value, 0.316, is higher than the anticipated significance value, 0.005, which is a measure of significance. This indicates that regression model 3's explanatory variables have little bearing on how the profitability of Nepalese commercial banks is affected. The regression model's overall explanatory power has a reasonable R2 of 0.125. This shows that other variables account for the remaining 87.50% of the change in Spread ratio's explanation, leaving independent variables to account for 12.50% of the variation in the dependent variable, return on equity. The regression's findings are based on Table 8, which shows that the Capital

Adequacy ratio is -0.21. It demonstrates that CAR and Spread ratio have a bad association. The P value, which is greater than 0.05, is 0.630. It suggests that the link between CAR and Spread ratio is negative and statistically negligible.

The debt-to-equity ratio's beta coefficient is -0.061. It demonstrates that D-ER and Spread ratio have a bad relationship. The P value, which is greater than 0.05, is 0.381. The Advance to Assets ratio's beta coefficient is -0.035. It demonstrates the inverse correlation between AAR and Spread. The P value, which is greater than 0.05, is 0.191. It shows that the correlation between AAR and Spread is negative and statistically negligible. Government securities' beta coefficient in relation to all investments is 0.004. It demonstrates the strong correlation between G-STIR and Spread. The P value, which is greater than 0.05, is 0.611. It shows that G-STIR and Spread have a positive but statistically insignificant connection. A non-performing loan has a beta coefficient of 0.027. It demonstrates a favorable correlation between NPLR and Spread. The P value, which is less than 0.05, is 0.037. It suggests that NPLR and Spread have a favorable but statistically significant relationship.

			avorable but statistically sign	Biiiiie aiit i eia	tremsinp.	
Table 8. Regression analysis between SPREAD and explanatory variables.						
M 11	Unstandardize	d coefficients	Standardized coefficients T		n valua	
Model	В	Std. Error	Beta	1	p-value	
Constant	6.508	2.152		3.024	0.004	
CAR	-0.021	0.053	-0.055	-0.381	0.63	
D-ER	-0.061	0.069	-0.173	-0.883	0.348	
AAR	-0.035	0.026	-0.193	-1.323	0.2	
G-STIR	0.004	0.007	0.095	0.62	0.611	
NPLR	-0.027	0.033	0.101	0.509	0.037	
R ² _0.101 Adj. R ² _0.125 F_1.212, p-value_0.316 ^a						

SR=6.508 -0.021CAR-0.061D-ER-0.035AAR+0.004G-STIR-0.007NPLR

Regression Result of Model 4

In Table 9, the regression results for all profitability ratios are presented. The dependent variable is the mean profitability ratio, while the independent variables are various capital adequacy ratios. This regression model displays the effect of these ratios on the combined mean of profitability ratios, including ROA, ROE, and the spread ratio. Based on the data, the F value is calculated to be 0.814, meaning it is greater than the significance value of 0.05. According to the coefficient correlation, there is a negative relationship between the Debt-Equity Ratio and Average Profitability ratio, with a value of -0.225.

DISCUSSION

However, the P value of 0.416 is higher than the threshold of 0.05, indicating a statistically insignificant relationship between the two. Jiang discovered that the equity capital ratio did not significantly impact banks' profitability. The beta coefficient of Advances to Assets ratio is -0.175, indicating a negative relationship with the Profitability ratio. The P value of 0.102 is also greater than 0.05, indicating a statistically insignificant relationship between the two. On the other hand, the beta coefficient of government securities to total investment is 0.16,

coefficient of -0.003. The P value of 0.982 is higher than 0.05, indicating a statistically insignificant relationship between the two. While Frederick (2014) found that the NPL has a significant negative effect on profitability. 10 Duraj & Moci proved it. 11 This suggests that the explanatory variables used in this regression model are not significant in explaining the impact of capital adequacy on profitability performance, as the calculated significance value is 0.545, higher than the expected significance. While some studies such as those by Tamang and Thakur found a significant correlation between capital adequacy variables and bank profitability performance. 12, 13 Jha discovered a negative association between the Capital Adequacy ratio and ROA.¹⁴ The regression model's explanatory power is moderate, with an R2 value of 0.070. This means that 7% of the fluctuation in profitability can be accounted for by changes in the explanatory variables. The other 93% is influenced by other factors. The beta coefficient for the Capital Adequacy ratio is -0.019, indicating a negative correlation with the Average profitability ratio. The P value is 0.929, which is higher than the expected significance level. This suggests that there is no significant relationship between the Capital Adequacy ratio and profitability ratio. Studies have shown mixed results on the

Table 9. Regression analysis between Average Profitability Ratios and Explanatory Variables.							
Model	Un-standardiz	ed coefficients	Standardized Coefficients	Т	p-value		
	В	Std. Error	Beta	•	p varue		
Constant	20.784	8.5358		2.434	0.018		
CAR	-0.019	0.212	-0.13	-0.089	0.929		
D-ER	-0.225	0.275	-0.163	-0.819	0.416		
AAR	-0.175	0.105	-0.246	-1.666	0.102		
G-STIR	0.016	0.028	0.091	0.584	0.562		
NPLR	-0.003	0.13	-0.005	-0.023	0.982		
$R^2 = 0.070$ Adj. $R^2 = -0.16$ $F = 0.814$ p-value= 0.545^a							

PR=20.784-0.019CAR-0.225D-ER-0.175AAR+0.016G-STIR-0.003NPLR+E

indicating a positive relationship with the Profitability ratio. However, the F value of 0.562 is higher than the threshold of 0.05, indicating a statistically insignificant relationship between the variables. Lastly, there is a negative relationship between the non-performing loan ratio (NPLR) and profitability ratio, with a beta

relationship between capital adequacy ratio and firms' profitability performance. Alkadmani found a negative correlation between banks' profitability and CRAR, while Ngo (2006) found no significant relationship between bank capital and profitability.¹⁵

CONCLUSIONS

The study examined various capital adequacy determinants, including CAR, D-ER, AAR, G-STIR, and NPLR. CAR showed no significant impact on ROA, with a negative relationship at a 0.05 significance level. In contrast, D-ER and Advances-to-Assets Ratio exhibited a positive and significant relationship with ROA. G-STIR had a positive relationship but lacked significance at a 0.05 level. NPLR had a significant negative impact on ROA. The study revealed a negative correlation between profitability and CAR, emphasizing the diverse effects of capital adequacy measures on bank profitability. The inclusion of non-risk-weighted measures, especially debt-equity,

highlighted their negative impact on profitability. The study acknowledged the limited impact of variables on commercial bank profitability in Nepal, attributing it to the exclusion of macroeconomic factors. The implications suggest a need for a nuanced approach to capital management beyond high CAR, emphasizing the importance of D-ER and Advances-to-Assets Ratio. The study calls for a balanced and strategic capital structure. Limitations and the call for considering macroeconomic factors stress the importance of a holistic understanding of external factors on bank profitability, urging commercial banks in Nepal to adopt a more comprehensive approach to capital management.

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