CAPITAL STRUCTURE AND PROFITABILITY OF A COMPARATIVE STUDY ON GOVERNMENT AND JOINT VENTURE BANKS IN NEPAL

Ramesh Mukhiya[1]

[1]*Department of Management, Baneshwor Multiple Campus, Kathmandu, Nepal; Email: rameshmukhiya117@gmail.com*

ABSTRACT

The study intends to look into how capital structure affects the Nepalese Government and the Joint Venture Bank's profitability. The statistical analysis of the study includes the secondary data. Using software for analysis, a descriptive and causal comparative analysis has been conducted by gathering data from bank websites and using correlations and multiple regression models for hypothesis testing. Out of the entire population, 2 Government and 3 joint venture banks have been taken as a sample for the study. The capital structure and profitability have been investigated as a cause-and-effect relationship using a causal comparative research design. In this study, NIM is used as a dependent variable, and leverage ratio, bank size, liquidity ratio, and capital ratio are independent variables. As a statistical tool, the following tools are used: mean, standard deviation, correlation, multiple regression model, and hypothesis testing. Excel and SPSS are both used to evaluate those variables. Leverage Ratio and bank size have a negative and significant impact on NIM in Nepal's government banks. The Liquidity Ratio shows an insignificant and positive effect on NIM. The capital ratio has a significant and favourable impact on the NIM of government banks. Whereas the Leverage Ratio has an insignificant positive impact on the NIM of Joint Venture Banks. Bank Size has a significant negative relation with NIM. Liquidity Ratio shows a significant and positive relation with NIM. Capital ratio has an insignificant negative impact on the NIM of Joint Venture Banks. However, Banks should value the significance of other variables.

Keywords: leverage ratio, bank size, liquidity ratio and capital ratio.

INTRODUCTION

One of the most used terms in financial research is capital structure. We discuss a number of capital structure theories, including the Pecking Order Theory, the NI Approach, the NOI Approach, the MM Approach, and the Trade-off Theory. We are going to evaluate other firm-specific factors, such as profitability. Our research demonstrated the connection between several capital structure factors and financial leverage. Based on our investigation, we have also examined a number of possible future patterns (Gupta & Khanna, 2022).

This study focuses on the need for a theoretical justification of the inverse relationship between capital structure and firm performance. It is the first to use logical reasoning to examine the moderating effects of firm size between these factors by focusing on accounting measurements of business performance. As a result of the potential for

variation (IQBAL, 2022).

We take note of several studies that looked at low-income emerging nations, like Ethiopia, to investigate the relationship between capital structure and bank profitability, while multiple studies examined the effect of non-interest revenue on profitability. Previous research concentrated on evaluating the impact of capital structure alone on bank profitability (Ayalew, 2021). Again, we discuss past research that looked at one of Asia's developing countries, like Bangladesh (Rana-Al-Mosharrafa & Islam, 2021).

However, little research has been done on how capital structure, operational efficiency, and non-interest revenue all work together to affect the banking industry's profitability (Hossain & Ahamed, 2021). Capital structure is the contrast or balance between domestic and foreign capital. In this case, both short-term and long-term debt are considered foreign capital. The objective is to increase the company's market value even when retained earnings and ownership interests make up the company's own funds (Brigham & Ehrhardt, 2011).

Capital is one of the most important components of a corporation. In actuality, an organisation could not function without funds. Any type of business, from a small convenience store to a major group of companies, cannot be started without funding. Every organisation starts with a balance of zero and only exists when its promoters, owners, or shareholders contribute money. Every organisation should have enough money to run. Although banks are the primary source of capital, banks also need to create capital in order to run their operations. The importance of a bank's depositor capital stems from its obligation to the public. Therefore, banks must have sufficient capital to safeguard the interests of depositors (Patheja, 1994).

Commercial banks get a substantial amount of deposits from the general public. Depositors find comfort and security in knowing that their money is safe when they put it in a bank. However, what would happen if the bank lacked the capital necessary to serve as a buffer against future unexpected losses? In order to protect its counterparties and depositors from risks like credit and market risk, a bank must have enough capital. If this weren't the case, banks would use all of the depositors' money for personal benefit, which would result in losses for the depositors. As of right now, B-class and C-class financial institutions are required by the NRB, which regulates banks and financial institutions in Nepal, to employ DCGC to cover individual depositors up to two lakhs. (Paudel, 2009).

The study's major goal is to determine the causes and effects of capital structure on the profitability of those banks from 2069–2070 to 2078–2079 BS in terms of financial performance by selecting two government and three joint venture banks as sample banks. The objectives are listed as follows: (i) To examine the impact of leverage ratio on profitability (NIM), (ii) To analyze the impact of bank size on profitability (NIM), (iii) To assess the impact of liquidity ratio on profitability (NIM), and (iv) To examine the impact of capital ratio on profitability (NIM).

THEORETICAL FRAMEWORK

In broad terms, the theoretical framework is the foundation upon which the theory of a research study is constructed. This indicates that it describes the underlying theory of the research study and clarifies the reasons behind the emergence of the research challenge. This part will provide some development of the hypotheses and motives behind the research. Along with the theme and supporting elements, the theory supporting the research study will also be selected. The dependent and independent factors that influence the research study will be the main topic of this section of the investigation.

A variety of independent factors have diverse impacts on the bank's profitability. However, this will depend on the kind of investment that investors are ready to make. This suggests that whereas short-term investors usually focus primarily on technical and economic factors, long-term investors usually depend on fundamental characteristics as well. Short-term variables also take into consideration the market's state of mind. Some of these variables are presented here because economic difficulties account for the majority of the variables included in this study. The following graphic presents the theoretical context for these variables.

Capital Structure	**Profitability**
Independent Variable	Dependent Variable
• Leverage Ratio	• Net Interest Margin (NIM)
• Bank Size	
• Liquidity Ratio	
• Capital Ratio (CAP)	

(Source: Mehzabin, Shahriar, Hoque, Wanke, & Azad, 2022).

NIM is the dependent variable because the research study is based on data from the financial report. Furthermore, NIM is directly impacted by other variables. Because they are unaffected by other variables, the leverage ratio, bank size, liquidity ratio, capital ratio (CAP), and operating efficiency will also be considered independent variables of the government banks and joint venture banks.

METHODS

Research methodology is a systematic way of approaching the research question. Stated in distinct ways, research methodology encompasses the methods and approaches employed during the entirety of the study. The phrase "research methodology" describes the several steps a researcher must follow to analyze a topic with particular objectives in mind, as well as the rationale behind each action (Kothari, 1994:9). Under the (Gebrayel et al., 2018; Mercier Suissa et al., 2018; Salloum et al., 2019; Salloum et al., 2015), this

study's estimated model is reliable and consistent. Additionally, panel data estimations incorporate bank-specific and panel-specific variables that involve random aspects and account for persistent variability over time, resulting in an effective conclusion.

Additionally, this econometric approach allows the assessment of dynamic impacts, which are usually difficult to establish by implementing cross-sectional or time series investigations (Athanasoglou et al., 2008).

Research methodology refers to the entire process by which we attempt to resolve problems or provide answers to inquiries. It is based on a number of theories, notions, and procedures. It's a technique for approaching the study problem methodically. It is the process of identifying a problem's solution by the purposeful and methodical collection, assessment, and interpretation of data. It includes several kinds of research designs, population and sample, data sources, methods for gathering and processing data, and tools and approaches for analysing data (software to be used in the research, statistical and financial instruments). Various dependent and independent variables are also included (Arellano & Bover, 1995).

The process used to collect information and data to ensure that business decisions can be made. The methodology may include published research, interviews, surveys, and other research techniques, along with current and historical data. Research technique refers to the several steps that researchers perform sequentially while analysing a topic with certain objectives in mind. To prepare this thesis, a variety of data from the NRB-provided balance sheet, profit and loss account, and financial statement of the Commercial Bank have been separated, along with information from the annual report of Banking from a few books and publications. After the relevant data has been sorted, financial and statistical methods have been used to study and interpret the different financial components of Commercial banks. Basically, how the report has been put together. The term "research design" refers to the framework and plan that a researcher prepares to conduct their study from start to finish. The causes and effects of the capital structures and profitability of five government and joint venture banks are examined using a causal comparative research design. The comparative research approach has been utilised in this context due to its focus on historical occurrences. It is a process for obtaining, evaluating, verifying, and interpreting previous evidence in an orderly and objective manner to conclude. The management of capital structures in commercial banks also takes historical data into reference. For this specific examination, a descriptive and analytical research approach has been employed. This helps in gathering sufficient facts and information in accordance with needs. The 22 commercial banks that are now in operation across the country make up the study's population. Out of 3 government banks and 6 joint venture banks, 2 government and 3 joint venture banks are included in the study's sample. In a casual comparison analysis, the researcher studied the capital structure and profitability of Nepal's commercial banks. Only two government and three joint venture banks have decided to use purposive sampling to provide a sample for a case-comparative study. In this manner:

Table 1. List of Sampled Banks with the Number of Observations

S.N.	Name of commercial	Abbrevia-tions	Sample Pe-riod	No. of Observa-tions
1	Agriculture Development Bank	ADBL	2069/70-2078/79	10
2	Nepal Bank Limited	NBL	2069/70-2078/79	10
3	Everest Bank Limited	EBL	2069/70-2078/79	10
4	Himalayan Bank Limited	HBL	2069/70-2078/79	10
5	Nabil Bank Limited	NABIL	2069/70-2078/79	10

The researcher has chosen ADBL, NBL, EBL, HBL and NABIL Bank. Because several commercial banks have been founded.

Table 2. Description of Variables

Variables	Measures	References
Leverage Ratio	Computed by the ratio of total debt to total assets.	Ayalew (2021), Mkadmi et al. (2021)
Bank Size	Bank size, computed by the	Adusei (2015), Ali and Puah (2019),natural loga-rithm of total assets ln (TA)
Liquidity Ratio	Computed by the ratio of Cur-rent Assets to Current Liabili-ties.	
CAP	Capital ratio, computed by the	Rana-Al-Mosharrafa and Islam (2021),the ratio of total equity to total assets.
NIM	A measure of net interest margin, computed by the ratio of investment return minus interest expenses to average earning assets.	

All independent variables and dependent variables can be assessed with the diverse data analysis method known as multiple regression. Cohen et al. state that nonlinear relationships, quantitative or qualitative independent variables, and the influence of one or more factors with or without the influence of other variables are all acknowledged in this study. Regression analysis is a statistical technique for examining relationships between variables. There are various methods for modelling and assessing multiple variables, with the relationship between the dependent variable and one or more independent variables

usually the main focus.

Profitability = f (LR, BS, CRR, CAP)

We will try to find out the effect of the variable on Net Interest Margin. The model is given below:

$$NIM = \beta_0 + \beta_1 LR + \beta_2 BS + \beta_3 CRR + \beta_4 CAP + \epsilon_i \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(i)$$

Where,

β_0 = Constant term

NIM = Net Interest Margin

LR = Leverage Ratio

BS = Bank Size

CRR = Liquidity

Ratio

CAP = Capital Ratio

$\beta_1, \beta_2, \beta_3, \beta_4$ = regression coefficient

ϵ_i = error terms

Data Analysis

The presentation of the data provides the basic framework for classifying and organising the data for the analysis. After data collection is complete, the data will be in raw form. The data will still be kept in early estimations, data collection forms, and note cards. Data analysis includes data organising, tabulation, statistical analysis, and conclusion. This chapter's topics are data collection, analysis, and presentation. NEPSE has classified the listed companies into various sectors, and samples were obtained according to these sectors.

RESULTS

This section's main objectives are data analysis and presentation. This section analyses the collected data through a range of graphical displays in addition to financial and statistical methods. The comparative profit and loss statements are included for the years 2069–2070 and 2078–2079, as well as the comparative balance sheet.

Table 3. Descriptive Statistics of Government Banks

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Leverage Ratio	20	4.12	14.41	6.2387	2.38640
Bank Size	20	24.98	26.28	25.6125	.40780
Liquidity Ratio	20	4.06%	36.21%	20.8685%	10.55431%
Capital Ratio	20	6.49%	19.54%	14.8160%	3.39973%
Net Interest Margin	20	2.86%	6.31%	4.5355%	1.10380%
Valid N (listwise)	20	-	-	-	-

Table 3 shows the leverage ratio from a minimum of 4.12 to a maximum of 14.41, leading to an average of 6.24. The size presented by the total assets of the government banks during the study period is 25.61, with a minimum of 24.98 and a maximum

of 26.28. Likewise, the liquidity ratio has a minimum value of 4.06 per cent and a maximum of 36.21 per cent with a mean of 20.87 per cent. The average capital ratio of the selected government banks during the study period is 14.81 per cent, with a minimum value of 6.49 per cent and a maximum of 19.54 per cent. And, the NIM has a minimum value of 2.86 per cent and a maximum of 6.31 per cent, with a mean of 4.54 per cent. Therefore, the maximum mean and minimum mean statistics of the sampled government banks are Bank Size, from a minimum of 24.98 to a maximum of 26.28, leading to an average of 25.61, and the net interest margin has a minimum and maximum mean statistic of the sampled banks is 2.86 per cent and 6.31 per cent, with a mean of 4.54 per cent.

Table 4. *Descriptive Statistics of Joint Venture Banks*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Leverage Ratio	30	6.91	13.39	9.3968	1.79163
Bank Size	30	24.84	26.75	25.6225	.46881
Liquidity Ratio	30	3.66%	37.52%	17.8913%	9.30476%
Capital Ratio	30	6.95%	12.64%	9.8839%	1.61429%
Net Interest Margin	30	1.99%	5.15%	3.5193%	0.72571%
Valid N (listwise)	30	-	-	-	-

Table 4 presents the leverage ratio from a minimum of 6.91 to a maximum of 13.39, leading to an average of 9.39. The size presented by the total assets of the joint venture banks during the study period is 25.62, with a minimum of 24.84 and a maximum of 26.75. Likewise, the liquidity ratio has a minimum value of 3.66 per cent and a maximum of 37.52 per cent with a mean of 17.89 per cent. The average capital ratio of the selected joint venture banks during the study period is 9.88 per cent, with a minimum value of 6.95 per cent and a maximum of 12.64 per cent. And, the NIM has a minimum value of 1.99 per cent and a maximum of 5.15 per cent with a mean of 3.51 per cent. Therefore, the maximum mean and minimum mean statistics of the sampled joint venture banks are bank size, from a minimum of 24.84 to a maximum of 26.75, leading to an average of 25.62, and net interest margin has a minimum and maximum mean statistic of the sampled banks is 1.99 per cent and 5.15 per cent, with a mean of 3.51 per cent.

Table 5. *Correlation of Government Banks*

		Leverage Ratio	Bank Size	Liquidity Ratio	Capital Ratio	Net Interest Margin
Leverage Ratio	Pearson Correlation	1	-.263	-.230	-.940**	-.170

BankSize	Pearson Correlation	1	-.106	.205	-.595[*]
Liquidity Ratio	Pearson Correlation		1	.302	.453[*]
Capital Ratio	Pearson Correlation			1	.349
Net Interest Margin	Pearson Correlation				1

The Pearson Correlation Coefficient between the independent variable, Leverage Ratio, and the dependent variable is -.170. This implies that there is a negative correlation between the leverage ratio and with NIM of the government banks. NIM results in a lower leverage ratio. This can be concluded that NIM is negatively correlated with LE at a 1 per cent significant level, i.e. (r = = -.170, p=0.00 >0.01).

The Pearson Correlation Coefficient between the independent variable Bank Size and the dependent variable is -.595. This implies that there is a negative correlation with NIM of the government banks. It indicates that large NIM results in lower Bank Size. This can be concluded that NIM is negatively correlated with Bank Size at a 1 per cent significance level, i.e. (r = -.595, p=0.00 >0.01).

The Pearson Correlation Coefficient between the independent variable Liquid- ity Ratio and the dependent variable NIM is .453. This implies that there is a positive correlation with NIM of the government banks. It indicates that large NIM results in a higher liquidity ratio. This can be concluded that NIM is positively correlated with liquidity ratio at a 1 per cent significance level, i.e. (r = .453, p=0.00<0.01).

The Pearson Correlation Coefficient between the independent variable, Capital Ratio, and the dependent variable is .349. This implies that there is a positive correlation between the Capital Ratio with NIM. It indicates that large NIM results in a higher Capital ratio. This can be concluded that NIM is positively correlated with CAP at a 1 per cent significance level, i.e. r = .349, p=0.00 <0.01, of the government bank.

Table 6. *Correlation of Joint Venture Banks*

	Ratio	Leverage	Bank Size	Liquidity Ratio	Capital Ratio	Net Interest Margin
Leverage Ratio	Pearson Correlation	1	-.693[**]	.214	-.988[**]	.256
Bank Size	Pearson Correlation		1	-.496[**]	.704[**]	-.692[**]

			1	-.223	.019
Liquidity Ratio	Pearson Correlation		1	-.223	.019
Capital Ratio	Pearson Correlation			1	-.246
Net Interest Margin	Pearson Correlation				1

The Pearson Correlation Coefficient between the independent variable, Leverage Ratio, and the dependent variable NIM is .256. This implies that there is a positive correlation between the Leverage Ratio and with NIM of the joint venture banks. It indicates that large NIM results in a higher leverage ratio. This can be concluded that NIM is positively correlated with LE at a 1 per cent significant level, i.e. (r = .256, p=0.00 <0.01).

The Pearson Correlation Coefficient between the independent variable Bank Size and the dependent variable NIM has remained -.692. This implies that there is a negative correlation between bank size with NIM of the joint venture banks. It indicates that large NIM results in lower Bank Size. This can be concluded that NIM is negatively correlated with Bank Size at a 1 per cent significant level, i.e. (r = -.692, p=0.00>0.01).

The Pearson Correlation Coefficient between the independent variable Liquidity Ratio and the dependent variable NIM is .019. This implies that there is a positive correlation between the liquidity ratio and with NIM of the joint venture banks. It indicates that large NIM results in a higher liquidity ratio. This can be concluded that NIM is positively correlated with liquidity ratio at a 1 per cent significant level, i.e. (r = .019, p=0.00<0.01).

The Pearson Correlation Coefficient between the independent variable Capital Ratio and the dependent variable NIM is -.246. This implies that there is a negative correlation between the capital ratio a n d with NIM of the joint venture banks. It indicates that large NIM results in a lower capital ratio. This can be concluded that NIM has negatively correlated with capital ratio at a 1 per cent significance level, i.e. (r = -.246, p=0.00 >0.01).

Regression Analysis

The multivariate statistics principle, on which regression is based, calls for the simultaneous observation and examination of several statistical outcome variables. The method is applied in the design and analysis of trade studies in several dimensions, accounting for the impacts of each variable on the important responses. In statistics, the coefficient of determination, or R2, is used to describe statistical models whose main objective is the prediction of future outcomes based on other relevant data. The degree to which a regression line fits a set of data is indicated by its R2 value, which ordinarily varies from 0 to 1. If the R2 is close to 1, then a regression line fits the data well; if the R2 is close to 0, then the regression line does not fit the data well. Adjusted R2 is used to take into consideration the addition of new variables to the model. Adding extra independent

variables expands the regression model. Unadjusted R2 will never go down, but it will nearly always climb. This will occur even if the extra components don't have a significant impact on the dependent variable's explanation. To compensate for this, adjusted R2 is connected with the number of independent variables in the model. The result is an adjusted R2, which varies based on whether the introduction of a new variable increases or decreases the model's ability to explain phenomena. Corrected R2 is always going to be less than unadjusted. The results of the analysis are presented in an ANOVA table. The column declarations in this table are "Source," "SS or Sum of Squares," "df" for degrees of freedom, "MS" for mean square, "F" for ratio of F, and "P, Probe, Probability, sig, or sig. of F." The t-test allows us to determine if a difference between two groups is "significant". A statistical technique called analysis of variance (ANOVA) is used to identify meaningful differences between means. "1%," "5%," and "10%" are frequently used to indicate significant quantities.

Table 7. Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856[a]	.734	.662	.0064131

a. Predictors: (Constant), Capital Ratio, Bank Size, Liquidity Ratio, Leverage Ratio

Source: Calculation using SPSS version 26 under Appendix I

R represents the multiple correlation coefficient, with a range that lies between -1 and +1. Based on Table 4.15, the R value has remained 0.856, which means net interest margin had a positive relationship with leverage ratio, bank size, liquidity ratio and capital ratio. R-squared represents the coefficient of determination and ranges between 0 and 1. Since R R-squared value was 0.734, it means 73.4% of the variation in net interest margin is caused by leverage ratio, bank size, liquidity ratio and capital ratio of the government banks.

Table 8. ANOVA Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.002	4	.000	10.321	.000[b]
	Residual	.001	15	.000		
	Total	.002	20			

a. Dependent Variable: Net Interest Margin

b. Predictors: (Constant), Capital Ratio, Bank Size, Liquidity Ratio, Leverage Ratio

Source: Calculation using SPSS version 26 under Appendix I

The dependent variable net interest margin was regressed on the predicting variables of leverage ratio, bank size, liquidity ratio and capital ratio. The independent variables significantly predict net interest margin. $F_{(4, 15)} = 10.321$, $P<0.01$, which indicates that the four factors under study have a significant impact on net interest margin.

Table 9. Multiple Regression Analysis (Gov. Bank, NIM)

Coefficients[a]						
Mod-el	Variable	Unstandardized Coefficients		Standard-izedCoeffi-cients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.365	.106		3.426	.004
	Leverage Ratio	.004	.002	.896	2.219	.042
	Bank Size	-.016	.004	-.591	-4.194	.001
	Liquidity Ratio	.023	.015	.220	1.535	.091
	Capital Ratio	.405	.132	1.246	3.064	.008

a. Dependent Variable: Net Interest Margin

Source: Calculation using SPSS version 26 under Appendix I

Table 9 shows that the leverage ratio, bank size and capital ratio have a positive relationship with the dependent variable of the government bank. It indicates statistically significant, because the p-value for this variable is lower than 0.05. This indicates that when the leverage ratio, bank size and capital ratio of the government banks increase, it results in to increase in the net interest margin of the banks. Liquidity Ratio has a negative relation with the dependent variable. It indicates statistically insignificant because the p-value for this variable is higher than 0.05. This indicates that when the liquidity ratio of the government banks increases, it results in to decrease in the net interest margin of the banks.

Table 10. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Es-Estimate
1	.899[a]	.807	.777	.0034303

a. Predictors: (CConstant), Capital Ratio, Liquidity Ratio, Bank Size, Leverage Ratio

Source: Calculation using SPSS version 26 under Appendix I

R represents the multiple correlation coefficient, with a range that lies between -1 and +1. Based on Table 4.24, the R value has remained 0.899 for the joint venture banks. It means net interest margin had a positive relationship with leverage ratio, bank size, liquidity ratio and capital ratio. R-squared represents the coefficient of determination and ranges between 0 and 1. Since R R-squared value was .807, it means 80.7% of the variation in net interest margin was caused by leverage ratio, bank size, liquidity ratio and capital ratio of the joint venture banks.

Table 11. ANOVA Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.001	4	.000	26.199	.000[b]
	Residual	.000	25	.000		
	Total	.002	30			

 a. Dependent Variable: Net Interest Margin

 b. Predictors: (Constant), Capital Ratio, Liquidity Ratio, Bank Size, Leverage Ratio

Source: Calculation using SPSS version 26 under Appendix I

The dependent variable net interest margin was regressed on the predicting variables of leverage ratio, bank size, liquidity ratio and capital ratio. The independent variables significantly predict net interest margin, $F_{(4, 25)} = 26.199$, $P < 0.01$, which indicates that the four factors under study have a significant impact on the net interest margin of joint venture banks.

Table 12. Multiple Regression Analysis (JVB, NIM)

Coefficients[a]

Model	Variable	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.524	.070		7.461	.000
	Leverage Ratio	.002	.002	.522	.937	.058
	Bank Size	-.022	.002	-1.389	-9.794	.000
	Liquidity Ratio	-.041	.008	-.530	-5.124	.000
	Capital Ratio	.508	.254	1.130	1.998	.057

 a. Dependent Variable: Net Interest Margin

Source: Calculation using SPSS version 26 under Appendix I

Table 12 shows that bank size and liquidity ratio have a positive relation with the Dependent variable of the joint venture bank. Because the researcher has found audited and unaudited data, but not published in some fiscal year of some sampled commercial banks. It indicates statistically significant, because the p-value for this variable is lower than 0.05. This indicates that when the bank size and liquidity ratio of the joint venture banks increase, it results in to increase in the net interest margin ofthe banks. Leverage Ratio and Capital Ratio have a negative relation with the dependent variable. It indicates statistically insignificant because the p-value for this variable is higher than 0.05. This indicates that when the leverage ratio and capital ratio of the joint venture banks increase, it results in to decrease in the net interest margin of the banks.

DISCUSSION

The result shows the Leverage Ratio has remained significantly negatively correlated with the NIM of government banks, which has remained dissimilar to the Leverage Ratio increases in the bank profitability of previous studies (Kiema & Jokivuolle, 2014; Grill et al., 2015). Bank Size has remained significantly negatively correlated with NIM of government banks. This indicates that it differs in some way. Because, former researcher explains that Bank Size enhances profitability (Regehr & Sengupta, 2016). In a similar study, the Liquidity Ratio has remained insignificant and positively correlated with the NIM of government banks (Sindhu et al., 2022). It means that it causes dissimilar with Lower predicted bankruptcy costs, reducing the cost of finance and risk exposures, allowing for greater money to support more revenue-generating firms, increasing profitability. The capital ratio continues to have a significant and favourable relation with the NIM of the government banks. It implies that the effects are similar to those of the former researchers (Barik & Raje, 2019; Bandyopadhyay, 2022).

In addition, the result shows Leverage Ratio has remained an insignificant positive correlation with NIM of joint venture banks, which is similar to Leverage Ratio increasing the bank profitability of previous studies (Kiema & Jokivuolle, 2014; Grill et al., 2015). Bank Size has remained significantly negatively correlated with NIM of joint venture banks (Gupta & Mahakud, 2020). Because previous researchers explain that Bank Size enhances profitability (Sindhu et al., 2022). In a similar study, the Liquidity Ratio has remained significantly positively correlated with the NIM of joint venture banks (Sapkota, 2024). It means that it causes similar with Lower predicted bankruptcy costs, reducing the cost of finance and risk exposures, allowing for greater money to support more revenue-generating firms, increasing profitability (Youssef, 2024). The Capital Ratio continues to have an insignificant negative relation with the NIM of the joint venture banks. It implies that the effects are dissimilar to those of previous researchers. Capital structure and bank performance. According to previous researchers, a positive and statistically significant association was discovered between capital to asset ratio and bank profitability and stated that increasing the bank capital

to asset ratio is beneficial for riskier banks in terms of reducing predicted bankruptcy costs and interest expenditures (Berrios, 2013; Abbas et al., 2019; Al-Sharkas & Al-Sharkas, 2022).

Implications

Although the study has long-term significance for Nepal's banking sector, it has three major limitations that should be addressed in follow-up investigations. To begin with, macroeconomic factors like GDP, inflation rate, and competitiveness were not considered in the study. Second, the study ignored unmeasured factors, including social conditions, political stability, and governmental control, in favour of measuring characteristics that could be measured. Moreover, by using other control variables like bank concentration, credit risk, and bankruptcy risk, the study can be further enhanced. As many Nepalese countries move from developing to developed economies, the study may soon be broadened to include the ideas of microfinance and financial inclusion to increase bank profit margins. This might have provided further details regarding the overall performance of banks. Finally, future research should concentrate on extending the study's time range and adding a few more financial variables in order to improve the reliability of the findings. The study concludes that bank managers seem to be conscious of interest expenses and, as a response, think about raising the bank capital ratio in order to reduce the demand from creditors for greater deposit returns in exchange for the expectation that shareholders will expropriate their claims. Commercial bank management should actively look for less expensive funding sources, such as consumer short-term financing with competitive interest rates, to increase their profitability.

The recent rise in short-term deposit mobilisation strategies and the nation's commercial banks' efforts to broaden their deposit base serve as evidence of this. In the meantime, bank management needs to make sure that overhead costs are minimised, because they adversely impact the profitability of the bank. Ultimately, the Bank of Nepal's bank capitalisation approach is accepted due to the positive correlation between performance and the capital-to-assets ratio.

CONCLUSION

This study aims to determine how much the capital structure impacts the banking sector's profitability. Leverage ratio and Bank Size have remained significantly negatively correlated with NIM of the government banks. It affects deposit and lending decrease, nonperforming loan increase, growth rate decrease, bonus dividend increase, and investment opportunity decrease. There is an insignificant positive correlation between the liquidity ratios with the NIM of the government banks. Where deposit and lending increase, non-performing loans decrease, reserve increases, growth rate increases, bonus dividend increases, investment opportunity increases, interest-earning assets decrease and net interest income increases. Capital Ratio has remained significantly positively correlated with NIM of the government banks. Which effects deposit and lending increase, nonperforming loans decrease, net interest income increase, reserve

decrease, growth rate increase, bonus dividend increase, and investment opportunity increase in the government banks?

Leverage Ratio has remained insignificant positively correlated with NIM of the joint venture banks. Which effects deposit and lending increase, nonperforming loans decrease, reserve increase, bonus dividend decrease, investment opportunity increase, growth rate increase, and interest decrease. There is a significant negative correlation between bank size with NIM of the joint venture banks. Its effects on deposit decrease, lending decrease, nonperforming loan increase, reserve decrease, growth rate decrease, bonus dividend increase or constant, investment opportunity decrease, and interest increase. Liquidity Ratio has remained significantly positively correlated with NIM of the joint venture banks. Its impact on investment opportunities increases, net income increases, and interest decreases in the joint venture banks. Capital Ratio has remained insignificant negative correlation with NIM of the joint venture banks. Its impacts on deposit decrease, lending decrease, nonperforming loan increase, reserve decrease, growth rate decrease, bonus dividend increase or constant, investment opportunity decrease and interest increase of the joint venture banks. The outcome is affected by leading bank standards, tax laws, the CSER Committee's participation, and the presence of foreign directors. Despite the fact that the data on Bank Size, Liquidity, and Capital were a limitation for this study, we nonetheless advise that comparable analyses be performed for future studies that encompass all of the country's banks. This study has given us a framework for understanding the mix of leveraged finance used by Nepalese banks.

CONFLICT OF INTEREST

The author declared no conflict of interest.

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