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Assessing the Relationship between Capital Structure and Financial Performance of Commercial Banks in Bhutan

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Abstract
This study examines the relationship between capital structure and the financial performance of Bhutan's five commercial banks - Bank of Bhutan Limited (BOBL), Bhutan national Bank Limited (BNBL), Bhutan Developmental Bank Limited (BDBL), Druk Punjab Bank Limited (DPBL) and T Bank Limited from 2014 to 2023. Using audited annual reports, the study applied descriptive statistics and regression analysis to evaluate how debt ratio, equity ratio, and debt-to-equity ratio influence bank profitability measured through Return on Assets (ROA) and Return on Equity (ROE).
Results show that debt financing and debt-to0equity mix have a statistically significant negative effect on ROA, while equity ratio demonstrates a statistically significant positive effect on ROA. In contrast, none of the capital structure variables exhibit a significant impact on ROE, suggesting that capital structure decisions affect asset efficiency more than shareholder returns for Bhutanese banks. The study concludes that reducing reliance on debt and improving equity-based financing may enhance asset profitability. Future research should incorporate boarder financial indicators and panel regression techniques to deepen understanding of capital structure dynamics within Bhutan's financial sector.
Keywords:Capital Structure, Financial Performance, Commercial Banks, Debt Ratio, Equity Ratio, Debt-to-Equity Ratio, Return on Assets (ROA), Return on Equity (ROE)

Background

A financial system is a network of financial intermediaries such as insurance companies, stock exchanges, and investment banks that work together to exchange and transfer capital from one place to another (Corporate Finance Institute, 2022). A robust financial system is foundational to the health of an economy. The Bhutanese financial system comprises of financial intermediaries, financial market, financial instruments, financial services and regulatory framework (Royal Monetary Authority, 2023). One of the primary roles of financial intermediary is to accumulate the idle savings of the people and make them available for investment. Moreover, they help in granting loans and facilitating exchanges (securities and trading) within and outside the country thereby ensuring the smooth functioning of the financial market in the economy (Saini & Sindhu, 2014). The oldest bank of Bhutan, Bank of Bhutan Limited (BOBL), was established by Royal Charter in May 1968 and it also served as the Central Bank of Bhutan till the establishment of the Royal Monetary Authority of Bhutan in 1982 and was registered under the Companies Act of the Kingdom of Bhutan, 2000 (Financial Institutions Training Institute Ltd, 2020). Currently, there are a total of five commercial banks which includes Bank of Bhutan Limited (BOBL), Bhutan National Bank Limited (BNBL), Bhutan Development Bank Limited (BDBL), Druk Punjab National Bank Limited (DPNBL), and T Bank Limited. The performances of these commercial banks depend on various factors and financing decision is one of them. Financing decision will determine the

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capital structure of a firm and could potentially impact the financial performance (James & Moshi, 2014). Therefore, the purpose of this research is to analyse the relationship between the capital structure and financial performance of commercial banks in Bhutan during the year 2014-2023.

Problem statement

An appropriate capital structure is a critical decision for any organization. An inappropriate capital structure can impede the banks' decision which will then lead to poor performances (Nkwasibwe & Katsigaire, 2024). There are many instances where a bank has ceased to exist due to their poor management of financial structure such as Silicon Valley Bank, Washington Mutual Bank, and First Republic Bank (Bertilson, 2024). This has led not only to their downfall but also affected major part of the US economy.

For a developing country like Bhutan, banks are essential for economic growth and maintaining financial stability as they handle all the transactions within the country. Commercial banks in Bhutan face persistent challenges related to asset quality, rising non-performing loans, uneven profitability, and differences in operational efficiency. Research and supervisory assessments (e.g., RMA Annual supervision Reports) highlight that some banks – particularly BDBL – have periodically encountered financial stress due to high credit risk exposure and deteriorating loan portfolios. These challenges raise concerns about whether the current caital structure choices of Bhutanese banks are contributing to financial strain or supporting sustainable performance. Rathore (2023), using the "Altman Z Score" method, revealed that there is a difference in the performance among the selected commercial banks. The Altman Z Score method calculates and forecasts the possibilities of a business going bankrupt through the use of ratio related to liquidity, profitability and solvency (Jha, 2023). Among the four commercial banks (BOBL, BNBL, DPNBL, T Bank) assessed, two commercial banks were found to be relatively healthy (BNBL and T bank), while the two other banks were in brink of insolvency. This indicates that the survivability of banks is at stake if they are not able to measure and manage credit risks. Additionally, a poor capital structure composition could be one of the reasons for poor performance of banks which impacts their financial position.

While debt financing allows banks to expand asset portfolios and lending activities, excessive dependency on debt increases leverage risk, weakens financial resilience, and may lower profitability during economic downturns. Conversely, higher equity financing strengthens solvency and reduces risk but may dilute returns to shareholders. The "appropriate" capital structure for Bhutanese banks, therefore, remains unclear and warrants empirical investigation.

Understanding how capital structure affects financial performance in the Bhutanese context is essential for improving risk management, strengthening regulatory compliance, and guiding strategic decisions. This study addresses this gap by examining the effects of debt, equity and debt-equity mix on the profitability of all commercial banks over a ten year period.

Research Gap

Previous studies related to Bhutanese banks have focused on financial soundness, efficiency, or determinants of profitability, but have not specifically assessed the direct relationship between capital structure and financial performance across all commercial banks. Examples include studies by:

- Cole & Carrington (2016) – broad assessment of Bhutan's financial sector
- Pradhan & Murari (2019) – determinants of performance of a single bank (BNBL)
- Suresh et al. (2019) – financial soundness and comparative performance
- Rahut et al. (2024) – general institutional performance

However, no empirical research has examined capital structure and profitability using multi-bank, multi-year data for Bhutan, not assessed how debt, equity, and leverage interact with ROA and ROE.

Thus, this study fills a significant research gap

by applying a 10 year bank level dataset to explore these relationships.

Research objectives:

1. To examine the impact of debt financing on the financial performance of commercial banks.
2. To assess the influence of equity financing on the financial performance of commercial banks.
3. To evaluate the impact of debt-equity mix financing on the financial performance of commercial banks.

Hypotheses

The following hypotheses were formulated based on the literature review to study the relationship between the capital structure and the financial performance of commercial banks in Bhutan.

H1: Debt financing does not significantly affect ROA.

H2: Equity financing does not significantly affect ROA.

H3: Debt-to-equity mix does not significantly affect ROA.

H4: Debt financing does not significantly affect ROE.

H5: Equity financing does not significantly affect ROE.

H6: Debt-to-equity mix does no significantly affect ROE.

Research significance

The study offers value to:

- Regulators: by identifying whether current bank leverage practices align with desired stability and performance outcomes.
- Commercial bank: by helping management determine optimal capital structure strategies.
- Policy maker: by providing evidence to support regulatory reforms related to capital adequacy or leverage limits.
- Academia: by contributing the first Bhutan-wide empirical study linking capital structure to financial performance.

The key reason for choosing this topic is the lack of extensive study on the capital structure and the financial performance of banks in Bhutan. As a developing country, Bhutan has various sectors that can be benefited from targeted improvements and assistance. Especially, in the banking sector, where a deeper understanding of the impact of capital structure and financial performance could significantly enhance the banks' ability to make effective financing decisions, thereby maximizing profits and minimizes risks. This research can not only be applied in banking institutions but also serve as a reference for other firms to understand the influence of capital structure on profitability and make better financing decisions.

Literature review

Empirical Review

Empirical review is a way of gaining knowledge by means of direct or indirect observations or evidences, where conclusions are derived from solid, verifiable findings. Empirical evidence can be analysed through critically assessing and synthesizing existing studies, focusing on evaluating data and findings to answer a particular research questions or fulfil research objectives (Bouchrika, 2025).

Relationship between Debt Financing and Financial Performance

Numerous studies have been conducted examining how the debt financing impacts the financial performance of the banks. For instance, studies conducted by Yakubu, et al. (2017) on the bank performance in Ghana and Ibrahim (2019) on the Impacts of Capital Structure on Bank Performance: A Case Study of Iraqi Private Banks, both suggested that the total debt has positive and statistically significant correlation with the bank's performances that is, as banks uses more debt to finance their assets, the profitability increases. Similarly, a study on Capital Structure and Commercial Banks Performance in Nigeria by Adeniyi et al. (2020) concluded that the short-term debt and long-term debt positively impact the profitability of the banks, indicating that as banks uses more debt financing, the performance is comparatively better.

However, a research conducted by Nwude

& Anyalechi (2018) on the impact of capital structure on the performance of commercial banks in Nigeria highlights that the debt financing negatively impacts the ROA of the banks in Nigeria. In addition to that, Siddik et al. (2017) also emphasized that there is a negative impact of high debt ratios on the Bangladeshi banks. Therefore, to further examine this difference in findings, the hypotheses (H1 and H4) were formulated. By testing these hypotheses, a clearer understanding on the impact of debt financing on financial performance have been realized.
The debt ratio is defined as:

$$debt\ ratio = \frac{Total\ debt\ (short\ term + Long\ term)}{Total\ asset}$$

Relationship between equity financing and financial performance

The impact of equity financing of the bank on its financial performance is multifaceted. For instance, Risfandy (2018) conducted a research on Equity Financing and Islamic Banks' Profitability: Evidence from the Biggest Muslim Country. The research suggested that equity financing decreases the profitability of the banks although the mode of financing is very risky especially in the conventional banks.
In contrast to the negative impacts, the study conducted by Suleiman et al. (2022) found out that the share capital and retained earnings have positive impact on the financial performance of the listed money deposit banks in Nigeria. Thus, to address this disparity in findings, the hypotheses (H2 and H5) were drafted.
The equity ratio is defined as:

$$equity\ ratio = \frac{Total\ Equity}{Total\ asset}$$

Impact of capital mix on the financial performance of the banks

Mixed capital financing, which includes both the debt financing and the equity financing will also impact the financial performance of the bank. According to Kumar (2018), it concluded that capital structure has a significant impact on the financial performance of the banks and banks may select an optimum mix of debt and equity.
Similarly, a research on Capital Structure and Firm Performance: Evidences from Commercial Banks in Tanzania by Kipesha and James (2014), found out that there is a significant negative association between capital mix and ROE but there is a positive association between capital-mix on the ROA of the banks. Consequently, to further examine this gap in findings, the hypotheses (H3 and H6) were developed. Testing these hypotheses have helped to further clarify and validate the impact of capital mix financing on the profitability.

$$debt\ to\ equity\ ratio = \frac{Total\ debt}{Total\ Equity}$$

Conceptual Framework

Conceptual framework is a framework design that includes key concepts, variables, expected relationships, and assumptions that guides the academic inquiry. It defines the scope of research, identifying variables, establishing research questions and guiding the selection of appropriate methodologies and data analysis techniques (Singh, 2023).

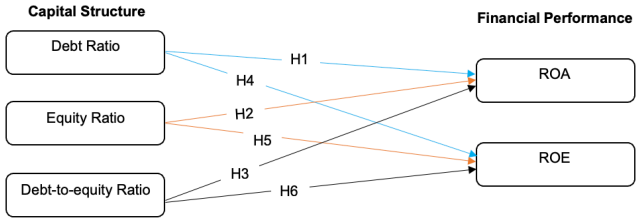

Figure 1: Conceptual Framework

Research Methodology

Research Design

A research design is a procedural plan or a framework adopted by researchers to answer research questions in a valid way. It is a method that combines various research components in a logical manner address the research problem efficiently, ensuring consistency, reliability, and validity throughout the study (Khanday & Khanam, 2023).
This study employed a quantitative research design, which requires collecting data, analysing and interpreting quantifiable data to prove the hypotheses. Specifically, a correlational research method, which examines two variables to demonstrate if there is a statistically con-

siderable relationship between them, have been employed to examine whether the variables are correlated and to analyse the degree of impact of the capital structure composition on the financial performance of the commercial banks (Ghanad, 2023).

Research Scope

This study focuses exclusively on the five commercial banks In Bhutan – BOBL, BNBL, BDBL, DPNBL, and T Bank – regulated under the Royal Monetary authority (RMA). These institutions dominate Bhutan's financial sector and collectively represents the primary channel of credit and deposits in the country.

The variables examined include three capital structure indicators (Debt Ratio, Equity ratio, Debt to Equity ratio) and two financial performances measures (ROA, ROE). Other indicators such as Net interest Margin (NIM), Capital Adequacy Ratio (CAR), or NPPL were excluded to maintain a clear focus on capital structure's impact.

Study Population

The population comprises of all commercial banks operating in Bhutan. Since only five commercial banks exists in the country, the study uses a census sampling approach, including all banks rather than selecting a subset.

This eliminates sampling bias and ensures full representation of the Bhutanese banking landscape.

Units of analysis:

- 5 banks * 10 years = 50 observations
- Balanced panel dataset

Data Collection

This study relies on secondary data extracted from audited annual reports available on the official websites of each bank and verified through RMA's financial publications. This dataset includes:

- Total asset
- Total Debt
- Total equity
- Net profit after tax

These values were used to compute the ratios required for analysis.

Data Quality and Reliability:

- All financial data come form audited annual reports, ensuring accuracy and authenticity
- Consistency of accounting standards were verified across banks, ensuring comparability.
- Outliers, particularly extreme negative ROE values for BDBL 9e.g., 2017), were assessed and retained as they reflect real economic conditions rather than measurement error.

Variable Definitions and Measurement

Independent variables (Capital Structure)

1. Debt Ratio (DR)

$$debt\ ratio = \frac{Total\ debt}{Total\ asset}$$

2. Equity Ratio (ER)

$$equity\ ratio = \frac{Total\ Equity}{Total\ asset}$$

3. Debt-to-Equity Ratio (DER)

$$debt\ to\ equity\ ratio = \frac{Total\ debt}{Total\ Equity}$$

Dependent Variable (financial performance)

1) Return on assets (ROA)

$$ROA = \frac{Net\ Income}{Average\ Total\ Assets}$$

2) Return on Equity (ROE)

$$ROE = \frac{Net\ Income}{Shareholders\ Equity}$$

Data Analysis Tool

This study has used descriptive statistics and inferential statistics to assess the relationship and impact of the capital structure on the financial performance of the commercial banks. An inferential research approach involves using the sample data to make a general conclusion about a larger population with the use of common methodologies such as hypothesis testing and analysis of variance (Allua & Thompson, 2009). Inferential statistical techniques such as correlation analysis, hypothesis testing, and regression analysis have been used. Karl Pearson's correlation coefficient has been adopted to study the strength and directions of the relationship between capital structure measures and financial performance indicators. A simple lin-

ear regression analysis has been used to test each hypothesis and determine the expected relationship between the variables. To test the significance, a 95% confidence level have been used (p-value ≤ 0.05). Statistical software, International Business Machines Statistical Package for the Social Sciences (IBM SPSS Statistics), has been used to run the regression analysis in this study.

Discussions and analysis of the results of the study

Introduction

Data collected to assess the relationship between the capital structure and financial performance of commercial banks in Bhutan are analysed and interpreted under this chapter. Capital structure measures such as debt ratio, equity ratio, and debt-to-equity ratio and profitability metrics such as ROA and ROE are used. Computation of all the ratios were carried out using Microsoft Excel and the analysis were carried out using SPSS software. The results are presented systematically in tables and interpreted as per APA-style reporting, drawing conclusions for each hypothesis.

Descriptive Statistics

Descriptive statistics are techniques that takes raw scores and organize or summarize them in a form that is more manageable. They describe the basic features of the study and provide a simple summary about the sample (Gravetter & Wallnau, 2014). The summary of five bank's financial performance and capital structure for ten years is shown below in Table 1.

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Debt Equity Ratio	50	3.20	12.69	8.6300	2.61492
Debt Ratio	50	.76	.93	.8866	.04089
Equity Ratio	50	.07	.24	.1135	.04084
Return on Assets	50	-3.76	2.68	1.1348	1.09289
Return on Equity	50	-37.31	22.61	9.9166	9.72311

Source: *Financial statements of sample commercial banks and own computation*

Key characteristics such as mean, minimum, maximum and standard deviation are used to summarize the observations and for each variable, there are 50 observations (five banks over ten years).

Interpretation

- The Mean det ratio of 0.89 indicates tat Bhutanese banks relies heavily on debt financing, consistent with their role as financial intermediaries.
- The mean Equity ratio on 0.11 suggests a low internal capitalization, which increases vulnerability to credit shock.
- The mean Debt-to-Equity Ratio (DER) of 8.83 shows leverage levels nearly nine times higher than equity – typically for banks but high relative to small economies.
- Average ROA (1.13%) indicates modest asset profitability, reflecting conservative lending and high operating costs.
- ROE (9.92%) shows moderate variations in shareholders returns.

Note: Outlier

One extreme outlier in ROE (BDBL – 37.31% in 2017) arises from increased provisioning due to loan defaults. This value was retained, as it reflects genuine economic conditions rather than measurement error. 0

Correlation Analysis

Correlation analysis is a statistical method used to measure the direction and strength of relationships between two or more variables. In other words, it helps to uncover the patterns within a dataset (Gell, 2025). To assess the relationship between capital structure and financial performance of commercial banks in Bhutan, we first tested to for the association between measures of capital structure and performance metrics using bivariate correlation test in the table below.

Table 2

Correlation results

		Debt Equity Ratio	Debt Ratio	Equity Ratio
Return on Assets	Pearson Correlation	-.362**	-.402**	.402**
	Sig. (2-tailed)	.010	.004	.004
	N	50	50	50
Return on Equity	Pearson Correlation	.009	-.021	.021
	Sig. (2-tailed)	.950	.884	.883
	N	50	50	50

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

Source: *Financial statements of sample commercial banks and own computation*

The test results showed a moderately negative and statistically significant association between the debt-to-equity ratio and ROA, r(50) = -.362,

$p < 0.05$ (0.010), suggesting that leveraging the debt over equity is correlated with lower asset efficiency. Moreover, the results showed that there is a statistically significant and moderately negative correlation between debt ratio and ROA, $r(50) = -.402$, $p < 0.05$ (0.004), indicating that higher debt levels decreases the return on assets. Contrarily, a statistically significant and moderately positive correlation was found between equity ratio and ROA, $r(50) = .402$, $p < 0.05$ (0.004), which implies that higher equity financing is associated with higher asset efficiency.

On the other hand, no statistically significant associations were observed between the capital structure metrics and ROE, as all the p-values are greater than alpha value (0.05). This suggests that capital structure has a significant influence on the ROA than on ROE for the commercial banks of Bhutan.

Regression Analysis

To study the relationship and impact of capital structure and financial performance of commercial banks, six separate simple linear regressions were conducted to test the six hypotheses. Simple linear regression is a statistical tool that summarizes the linear relationship between one independent variable, also called the explanatory variable, and one dependent variable, also called the response variable (Waples, 2024).

Table 3

Simple linear regression summary: Impact of debt ratio on ROA

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.162	9.253	0.004	-3.042	-10.745

a. Dependent Variable: Return on Assets

b. Predictor: (Constant), Debt Ratio

Source: *Financial statements of sample commercial banks and own computation*

The results showed that there is a statistically significant negative relationship between debt ratio and ROA of banks, $F(1, 48) = 9.25$, $p < 0.05$ (0.004). The $R2 = 0.162$, implying that about 16.2% of the variation in ROA is explained by the debt ratio. The unstandardized regression coefficient was $B = -10.75$, $t(48) = -3.04$, $p < 0.05$ (0.04). The coefficient beta of -10.75 implies that, assuming a linear relationship, a 0.1 (10%) increase in the debt ratio is associated with approximately a 1.08 percentage point decrease in ROA. Therefore, from this analysis, H1 was rejected, which states that debt financing does not significantly impact ROA.

Table 4

Simple linear regression summary: Impact of equity ratio on ROA

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.162	9.261	0.004	3.043	10.762

a. Dependent Variable: Return on Assets

b. Predictor: (Constant), equity Ratio

Source: *Financial statements of sample commercial banks and own computation*

The test result on the impact of equity ratio on ROA showed that there is a statistically significant positive relationship between the variables, $F(1, 48) = 9.261$, $p < 0.05$ (0.004). The R2 value of 0.162 indicates that 16.2% of the discrepancy in ROA is caused by equity ratio. The unstandardized coefficient beta is 10.762, $t(48) = 3.043$, $p < 0.05$ (0.004). The coefficient beta of 10.762 indicates that if equity ratio increases by 0.1 (10%), the ROA is expected to increase by approximately 1.08 percentage points. The analysis therefore, rejected H2, which states that equity financing does not significantly impact ROA.

Table 5

Simple linear regression summary: Impact of debt-to-equity ratio on ROA

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.131	7.222	0.01	-2.687	-0.151

a. Dependent Variable: Return on Assets

b. Predictor: (Constant), debt-to-equity Ratio

Source: *Financial statements of sample commercial banks and own computation*

The results showed that there is a statistically significant negative relationship between debt-to-equity ratio and ROA of banks, $F(1, 48) = 7.222$, $p < 0.05$ (0.01). The $R2 = 0.131$, implying that about 13.1% of the variation in ROA is explained by the debt-equity ratio. The unstandardized regression coefficient was $B = -0.151$, $t(48) = -2.687$, $p < 0.05$ (0.01). The coefficient beta of -0.151 implies that, assuming a linear relationship, for every 0.1 (10%) increase in the debt ratio, the ROA is expected to decrease by 0.0151 percentage points. Therefore, from this analysis, H3 was rejected, which states that debt-to-equity mix does not significantly impact ROA.

Table 6

Simple linear regression summary: Impact of debt ratio on ROE

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.00045	0.022	0.884	-0.147	-5.046

a. Dependent Variable: Return on Equity

b. Predictor: (Constant), debt Ratio

Source: *Financial statements of sample commercial banks and own computation*

The results from simple linear regression showed that there is a statistically insignificant negative relationship between debt ratio

and ROE of banks, F (1, 48) = 0.022, p > 0.05 (0.884), implying that debt financing does not predict any variation in ROE of the banks. The unstandardized regression coefficient was B = -5.046, t (48) = -0.147, p > 0.05 (0.884). Therefore, this analysis failed to reject H4, which states that debt financing does not significantly impact ROE.

Table 7

Simple linear regression summary: Impact of equity ratio on ROE

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.000457	0.022	0.883	0.148	5.089

a. Dependent Variable: Return on Equity

b. Predictor: (Constant), equity Ratio

Source: *Financial statements of sample commercial banks and own computation*

The results showed that there is a statistically insignificant positive relationship between equity ratio and ROE of banks, F (1, 48) = 0.022, p > 0.05 (0.883), indicating that equity financing does not predict the ROE of the banks. The unstandardized regression coefficient was B = 5.089, t (48) = 0.148, p > 0.05 (0.883). Therefore, the analysis failed to reject H5, which states that equity financing does not significantly impact ROE.

Table 8

Simple linear regression summary: Impact of debt-to-equity ratio on ROE

R Square	F–Value	Sig	t-Value	Unstandardized Coefficient Beta
0.000084	0.004	0.95	0.063	0.034

a. Dependent Variable: Return on Equity

b. Predictor: (Constant), debt-to-equity Ratio

Source: *Financial statements of sample commercial banks and own computation*

The test results showed that there is a statistically insignificant positive relationship between debt-to-equity ratio and ROE of banks, F (1, 48) = 0.004, p > 0.05 (0.95), implying that debt-to-equity ratio does not predict the ROE variations of the commercial banks. The unstandardized regression coefficient was B = 0.034, t (48) = 0.063, p > 0.05 (0.95). Consequently, this analysis failed to reject H6, which states that debt-to-equity mix does not significantly impact ROE.

One of the major reasons for extremely low R Square and Coefficient Beta values in Table 6, 7, and 8 could be due to the presence of extreme outlier under the variable, ROE.

Table 9

Results of hypotheses testing

Number	Hypotheses	Results	Tools used
H1	Debt financing has no significant impact on ROA	Rejected	Regression
H2	Equity financing has no significant impact on ROA	Rejected	Regression
H3	Debt-to-equity financing has no significant impact on ROA	Rejected	Regression
H4	Debt financing has no significant impact on ROE	Failed to reject	Regression
H5	Equity financing has no significant impact on ROE	Failed to reject	Regression
H6	Debt-to-equity financing has no significant impact on ROE	Failed to reject	Regression

Findings and Discussions

Under this section, major findings from statistical analyses carried out are discussed and are evaluated against empirical literature. The discussion also includes how study's objectives are achieved through findings.

The correlation and regression analysis results showed that there is a statistically significant and moderate negative relationship between debt ratio and ROA, implying that higher debt leads to lower asset efficiency among the commercial banks in Bhutan. This result is consistent with Nwude & Anyalechi (2018) and Siddik et al. (2017), who found out a similar negative impact of debt on asset return for Nigerian and Bangladeshi banks, respectively. On the other hand, the result contradicts with Yakubu et al. (2017) and Adeniyi et al. (2020), who found out that there is a positive relationship between the two variables for banks in Ghana and Iraq. However, this study found out that there is a statistically insignificant negative relationship between debt ratio and ROE. This finding aligns with Nwude & Anyalechi (2018).

The analysis results also revealed that there is a moderately positive and statistically significant relationship between equity financing and ROA, indicating that higher equity financing increases the asset profitability of banks. This result aligns with Suleiman et al. (2022), where the study found out that there is positive significant effect of retained earnings and other reserves on asset return. However, it contradicts with Risfandy (2018), who found out that there is negative impact of equity financing on bank's profitability. The differences in findings may arise due to

difference in banking systems and different methodological approaches. In contrast, the study showed a statistically insignificant relationship between equity financing and ROE in which, this result is also consistent with Nwude & Anyalechi (2018).

The results also showed that there is a moderately negative and statistically significant relationship between capital mix and ROA, implying that a higher reliance on debt relative to equity reduces the asset efficiency. This finding is relevant with Kumar (2018), where he found out that the debt-to-equity ratio has significantly negative impact on banks' profitability. Contrarily, Kipesha & Moshi (2014) found out that debt-to-equity ratio has positive significant relationship with asset return. However, this study revealed that there is a statistically insignificant relationship between the capital mix ratio and ROE which aligns with Kipesha & Moshi (2014), where the study showed a statistically insignificant impact of debt-to-equity on shareholders' return.

Recommendations

Over the past decade, commercial banks in Bhutan have heavily relied on debt as a source of financing for their assets and relied less on equity financing. The test results showed that debt ratio has statistically negative impact on ROA, indicating that higher debt leads to low profitability and asset inefficiencies. Therefore, the banks in Bhutan are recommended to reduce their dependence on debt financing and choose a proper capital composition to improve financial performance, asset efficiency and sustainable growth.

Future Scope

This study assessed the relationship between capital structure and financial performance of five commercial banks in Bhutan for the period ranging from 2014 to 2023, using variables such as debt ratio, equity ratio, and debt-to-equity ratio to measure the capital structure, and ROA and ROE to measure the profitability. The scope of this research was limited by its reliance on secondary data sources and the use of basic software analytical tools such as Microsoft Excel and SPSS.

Furthermore, other potentially influential factors such as non-performing loans, capital adequacy ratio, loan-to-deposit ratio, and net interest margin were not studied in this research, which future researchers could explore for a more comprehensive understanding.

Moreover, future researchers are encouraged to extend the methodology and framework of the study by including other sectors such as insurance, microfinance, or other non-financial corporate sectors, to compare the influence of capital structure across multiple financial contexts since this study only included banking sector.

Conclusion

This research aimed to assess the relationship between the capital structure and financial performance of the commercial banks in Bhutan, thereby addressing an existing research gap. Various literatures have highlighted the impact of independent variable i.e., leverage ratio on the financial performance of banks by taking dependent variables such as ROA and ROE. The analysis carried out using correlation and simple linear regression revealed that the capital structuring decisions of the banks have significant influence on the ROA but not on ROE. In particular, debt-to-equity ratio and debt ratio have negatively affected ROA while equity ratio proved to have positive impact on ROA. On the other hand, capital structure variables did not have statistically significant impact on ROE. The results indicate that the capital structure affects the efficiency of the assets, however, it does not affect the earnings of the shareholders.

In conclusion, the study confirms that capital structure plays crucial role in determining the efficiency of the asset as evidenced by its impact on ROA. The findings, however, were limited to certain variables and banking sector only so other variables and statistical tools may offer valuable insights.

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