Bank Lending Rate Determinants: Evidence from Nepalese Commercial Banks

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Abstract

This empirical study investigates the determinants of lending interest rates in Nepalese commercial banks, utilizing panel data spanning fiscal years 2073/74 to 2080/81. Employing multiple linear regression and correlation analyses, the research examines the influence of key financial variables—namely, interest rate on deposits, impairment charge rate, operating expenses, and non-operating expenses—alongside macroeconomic indicators such as inflation and economic growth. The findings reveal that the interest rate on deposits exerts a statistically significant positive effect on lending rates, indicating its central role in banks' pricing strategies. Inflation also demonstrates an important moderating influence, suggesting that lending rates are responsive to macroeconomic price dynamics. Conversely, impairment charges, operating and non-operating expenses, and economic growth did not exhibit significant linear associations. The financial model accounted for 92.6% of the variance in lending rates, reflecting high explanatory power. These results offer valuable insights into the cost-driven nature of interest rate formation and the sensitivity of lending behavior to inflation, with implications for monetary policy and financial regulation in emerging economies.

Keywords: Lending interest rate, Interest rate on deposit, Impairment charge rate, Operating and non-operating expenses rate

Introduction

A commercial bank is a financial institution that offers a range of services to the public, including accepting deposits, facilitating withdrawals, issuing loans, and performing various other financial operations.Lending interest rates play a central role in the

financial intermediation process, influencing both the cost of borrowing and the flow of credit in an economy. In developing countries like Nepal, understanding the determinants of lending rates is crucial, not only for enhancing banking sector efficiency but also for promoting broader macroeconomic stability and inclusive growth. Loan interest rates followed the 5Ps and 5Cs of product, place, price, protection, profit, character, capacity, capital, collateral, and condition (Niroula and Gnawali, 2023, p. 12). Despite regulatory frameworks and monetary interventions, lending rates in Nepalese commercial banks have shown notable fluctuations over the past decade, raising questions about the underlying drivers of interest rate behavior.

This study investigates the impact of key financial indicators—such as the interest rate on deposits, impairment charges, and operating and non-operating expenses—on lending interest rates. Additionally, it examines the moderating role of macroeconomic variables, particularly inflation and economic growth, in shaping lending rate dynamics. Prior literature suggests that banks adjust their loan pricing in response to cost structures and prevailing macroeconomic conditions. However, the extent to which these factors influence interest rate formation in the Nepalese context remains underexplored.

The primary emphasis of this study is on internal determinants that affect the lending rates set by banks. Banks must strike a balance between their core objectives—liquidity, profitability, and solvency—by ensuring efficient lending decisions. As credit forms the bulk of a bank's assets, analyzing its determinants is essential for Nepalese commercial banks seeking to optimize loan and advance allocations.

By analyzing panel data from four major commercial banks over the fiscal years 2073/74 to 2080/81, this research provides a comprehensive empirical foundation for identifying the most significant predictors of lending interest rates. The study employs regression and correlation techniques to quantify relationships and assess model strength, contributing valuable insights for policymakers, central bank officials, and financial analysts aiming to enhance transparency, predictability, and efficiency in Nepal's credit market.

Research Objectives

The primary objective of this study is to evaluate the determinants affecting the lending rate of Nepalese commercial banks. Efficiency in lending cannot be achieved by focusing on isolated factors; rather, an integrated approach is necessary, considering the cost of funds, impairment charge rate, operating expenses rate, non-operating expenses

rate, capital charge rate, inflation rate, and the growth rate of GDP. If banks fail to optimize their lending rate, itleads to financial instability. The specific objectives are listed below:

To examine key determinants affecting the lending rate of Nepalese commercial banks. To analyze the relationship and impact of the cost of funds, impairment charge rate, operating expenses rate, non-operating expenses rate, inflation rate, and the economic growth rate on the bank lending rate.

Literature Review

Previous studies have explored factors affecting bank lending rates in different economies. Commercial banks' lending is mostly determined by the gross domestic product of the country and the liquidity ratio to be maintained by the commercial banks. As there is a significant positive relationship between GDP and private sector credit of commercial banks, they should take into account the overall macroeconomic situation and factors affecting the GDP in general and their liquidity ratio in particular while taking lending decisions (Dhungana, 2019, p.17). Research highlights that macroeconomic variables such as GDP growth and inflation significantly impact loan interest rates. In Nepal, studies have shown that liquidity conditions and risk management strategies of banks are major determinants in credit extension. The literature further suggests that regulatory policies play a role in shaping lending behaviors in the Nepalese banking sector.

Ezirim (2005) emphasized that bank lending decisions are inherently risky, necessitating careful judgment and strategic handling. The effectiveness of lending practices, he argued, largely depends on the ability of credit analysts to perform thorough credit assessments, structure and present loan proposals effectively, and ensure accurate reporting.The major risk of the banking business lies in the credit function, as there is a high possibility of default. Further, there is also regulatory risk. The eye of the regulator and supervisor is on the credit performance of banks as they deal with public money. Therefore, they should be very careful, clever, and ethical in performing lending behavior.

Mbowe, Mrema, and Shayo (2020) conducted a study on factors influencing lending interest rates in Tanzanian banks, utilizing both descriptive and causal-comparative research designs. To assess the impact of various independent variables—including

statutory minimum requirements, return on assets, deposit rates, market concentration deviations, liquidity, non-performing loans, operating costs, provisions for bad loans, bank size, inflation, real GDP, and treasury bill interest—on the lending interest rate. The findings revealed that operating costs, non-performing loans, cost of funds, and inflation had statistically significant effects on lending rates, while bank size and liquidity exhibited adverse impacts. Additionally, the statutory minimum requirement (SMR) was found to have a negative but significant influence, suggesting that careful reductions in SMR could enhance banks' lending capacity.

Niroula, and Gnawali (2023) conclude that deposit interest rate, return on assets (ROA), and inflation have a positive and significant impact on lending interest rates in Nepalese banks, indicating that higher deposit rates and profitability drive up lending rates. Conversely, GDP shows an insignificant negative effect, suggesting that economic growth does not strongly influence lending rates in this context. Additionally, liquidity ratio (LR) and deposit rate (DR) exhibit insignificant positive effects, implying that while they contribute to lending rate variations, their influence is not statistically strong. Overall, the study highlights deposit interest rate, ROA, and inflation as the primary factors shaping lending interest rates in Nepal's banking sector.

Ghimire and Bhandari (2023) investigated the determinants of lending interest rates in Nepalese commercial banks, analyzing factors that influence lending decisions. Using panel data from 2016 to 2021, the study employed both descriptive and causal-comparative research designs. A sample of fifteen financial institutions was selected for examination, with operating cost to total assets, deposit interest rate, profitability, and default risk as independent variables, while the lending interest rate served as the dependent variable. The findings revealed that the deposit interest rate had a significant and positive effect on lending rates, whereas other variables exhibited a favorable but minimal impact on loan interest rates.

Timsina (2019), published by the Nepal Rastra Bank, examined the determinants of commercial bank lending behavior in Nepal using time series data from 1975 to 2014. The study employed an Ordinary Least Squares (OLS) regression model, with private sector credit as the dependent variable and interest rate, volume of deposits, cash reserve ratio, liquidity ratio, inflation, exchange rate, and GDP as independent variables. The findings revealed that GDP and liquidity ratio had the most significant impact on lending behavior, while interest rate and inflation also played notable roles.This study

supports the notion that macroeconomic indicators such as GDP and inflation are critical in shaping lending dynamics, aligning with your findings where inflation significantly influenced lending interest rates, while economic growth showed no significant effect. Moreover, the emphasis on deposit volume and interest rate as key drivers of lending behavior resonates with your result that interest rate on deposits is the strongest predictor of lending rates.

Bhattarai (2020) titled "Bank Lending Determinants: Evidence from Nepalese Commercial Banks," provides valuable insights into the factors influencing bank lending behavior in Nepal. Using balanced panel data and regression analysis, the study examined the effects of liquidity, investment portfolio, cash reserve ratio, bank size, GDP growth rate, and inflation on loan and advance volumes. The findings revealed that investment portfolio, cash reserve ratio, and bank size had positive and statistically significant effects on lending, while liquidity showed a negative but significant relationship.

Research Methodology

Research Design

The study employs a quantitative, explanatory research design aimed at examining the causal relationship between financial factors and macroeconomic indicators on lending interest rates. This approach facilitates the use of statistical tools to test hypotheses and measure the strength of associations.

Nature and Source of Data

This study utilizes secondary data drawn from the annual reports of four selected Nepalese commercial banks out of twenty, spanning eight fiscal years from 2073/74 to 2080/81.Macroeconomic data such as inflation and economic growth rates were obtained from credible government sources, including the Nepal Rastra Bank and the Central Bureau of Statistics.

Data Analysis Tools and Techniques

The data are processed and analyzed with the aid of IBM SPSS Statistics version 26. Key statistical methods include:

Descriptive Statistics to summarize central tendencies and dispersion.

Normality Testing (Shapiro-Wilk) to validate parametric assumptions.

Multicollinearity Diagnostics using Variance Inflation Factor (VIF) and Tolerance.

Correlation Analysis to identify linear relationships between variables.

Multiple Linear Regression to assess the individual and combined effects of predictors on lending rates.

Model Specification

Two regression models were constructed:

Model A (Financial Determinants): Examining the effect of IRD, ICR, OER, and NOER on LIR.

$$LIR = \beta 0 + \beta 1 IRD + \beta 2\ ICR + \beta 3\ OER + \beta 4\ NOER + \varepsilon$$

Model B (Macroeconomic Moderators): Assessing the influence of INF and EGR on LIR.

$$LIR = \beta 0 + \beta 5\ INF + \beta 6 EGR + \varepsilon$$

Where:

LIR = Lending interest rate for the bank during the t period.

IRD = Interest rate on deposit by customers for the bank during the t period.

ICR = Impairment charge rate for the bank during the t period

OER = Operating expenses rate for the bank during the t period

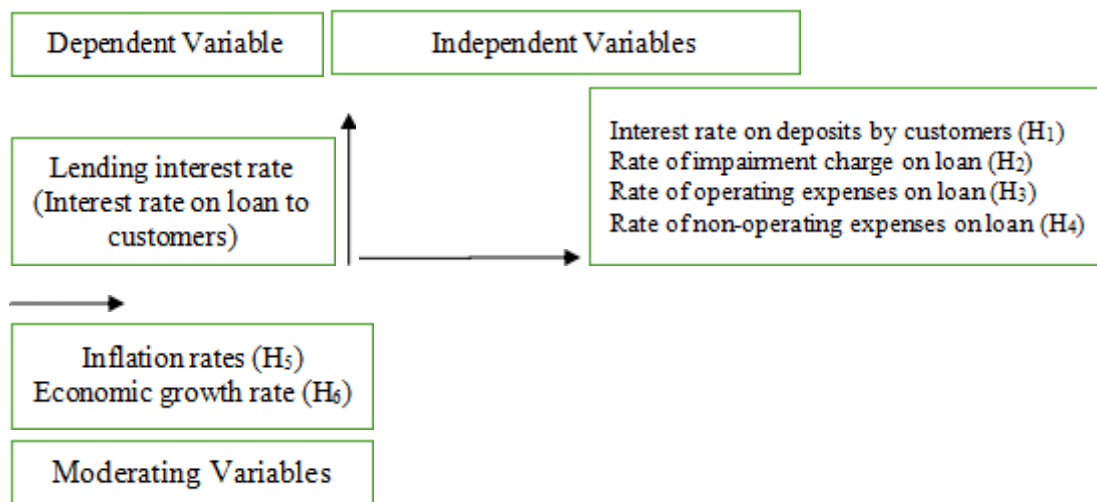NOER = Non-operating expenses rate for the bank during the t period

INF= Inflation rate of Nepal during the t period

EGR = Economic growth rateof Nepal during the t period

ε = Error terms $\beta 0$ = Intercept $\beta 1 - \beta 6$ = Coefficient of parameters.

t = Financial year 2073/74 to 2080/81

Research Framework

Results and Discussion

This section explains the findings of the study obtained from the data gathered from four Nepalese commercial banks from 2073/74 to 2080/81. Data was analyzed using the inferential statistics method.

NormalityTest of the Dependent Variable

A normality test is crucial in research because many statistical methods assume that data follow a normal distribution.Violation of this assumption can lead to misleading outcomes in hypothesis testing, confidence interval estimation, and regression analysis. In parametric tests, ensuring the dependent variable follows a normal distribution is crucial for the validity of the results.

Table 1

Normality Test Table

Dependent variables	Shapiro-Wilk		
	Statistic	df	Sig.(p-value)
Lending interest rate	0.204	8	0.200

Test distribution is Normal

(Source: Annual report of sample banks and data processing through SPSS – 26)

The Shapiro-Wilk test is typically preferred for assessing normality in small sample sizes (e.g., degrees of freedom = 8), as it is more sensitive in detecting departures from a normal distribution. A p-value greater than 0.05 indicates that the data does not significantly deviate from normality. A p-value of 0.20 suggests that the data likely follows a normal distribution, and therefore, parametric tests can be appropriately used in further analyses.

Collinearity Test of Independent and Moderating Variables

Multicollinearity occurs when two or more independent variables in a regression model are highly correlated. This condition can weaken the reliability of coefficient estimates by inflating standard errors and causing instability in the model. To detect multicollinearity, researchers commonly use the Variance Inflation Factor (VIF) and tolerance statistics. Normally, a VIF below 4 and a tolerance value above 0.25 indicate that multicollinearity is not a concern. Generally, a VIF above 4 or a tolerance below 0.25 indicates that multicollinearity might exist, and further investigation is required. When VIF is higher than 10 or tolerance is lower than 0.1, there is significant multicollinearity that needs to be corrected.(CFI Team, 2022, p.1145).

Table 2

Collinearity Test Table

Independent variables	Collinearity Statistics	
	Tolerance	VIF
Interest rate on deposits by customers	0.286	3.494
Rate of impairment charge on loan	0.547	1.829
Rate of operating expenses on loan	0.251	3.963
Rate of non-operating expenses on loan	0.350	2.859
Inflation rate	0.486	1.983
Economic growth rate	0.523	1.857

(Source: Annual report of sample banks and data processing through SPSS – 26)

In this study, all VIF values are under 4, and all tolerance values exceed 0.25, suggesting no multicollinearity issues among the independent variables.

Descriptive Statistics

The descriptive statistics containing minimum, maximum, mean, and standard deviation of the variables from the sample commercial banks were found, presented, and analyzed accordingly in this study.

Table 3   Descriptive Statistics (%)

Variables	Minimum	Maximum	Mean	Std. Deviation	Coefficient of Variance
Interest rate on deposits by customers	6.160	7.762	6.82525	0.615139	9.01
Rate of impairment charge on loan	1.752	3.936	2.43325	0.740060	30.41
Rate of operating expenses on loan	2.080	2.674	2.41375	0.244305	10.11
Rate of non-operating expenses on loan	0.0033	0.0216	0.01384	0.006445	46.54
Inflation rate	3.28	7.74	5.0888	1.60167	31.48
Economic growth rate	-2.40	6.00	3.5438	2.88808	81.26
Lending interest rate	9.626	12.170	10.9830	0.883446	8.04

The table provides descriptive statistics for seven key variables, encompassing financial factors (interest rates, impairment charges, operating and non-operating expenses) and macroeconomic indicators (inflation and economic growth). The results reveal varying degrees of stability and volatility among the variables. Interest rates and operating expenses show relatively stable patterns, whereas non-operating expenses, impairment charges, inflation, and particularly economic growth exhibit significant fluctuations.

These insights are essential for identifying trends and assessing the risks linked to financial and economic performance.

Correlation Analysis

Correlation analysis is a statistical approach used to determine the association level betweenthevariables. It shows thedirectionofthechangeormovement between variables. A high correlation indicates a strong association between two or more variables, whereas a low correlation suggests little to no relationship among them.

Table 4   Correlation Coefficients

	Interest rate on deposits by customers	Rate of impairment charge on loan	Rate of operating expenses on the loan	Rate of non-operating expenses on the loan	Inflation rate	Economic growth rate
Lending interest rate	0.945	0.621	0.756	0.847	0.795	0.350
Degree of Relationship	High degree of positive	Moderately positive	High degree of positive	High degree of positive	High degree of positive	Low degree positive
Sig. value	0.000	0.100	0.022	0.008	0.018	0.396
Statistically sig. / insig.	Significant relationship	Insignificant relationship	Significant relationship	Significant relationship	Significant relationship	Insignificant relationship

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

(Source: Annual report of sample banks and data processing through SPSS – 26)

The results highlight that the "Interest rate on loans to customers" is strongly and significantly influenced by its own cost of funding (deposit rates) and various bank expenses (operating and non-operating). It also shows a significant positive relationship with the macroeconomic inflation rate, indicating that banks adjust lending rates in response to changes in the general price level.

Conversely, while there's a moderate positive correlation with the "Rate of impairment charge on loan" and a low positive correlation with "Economic growth rate," these relationships are not found to be statistically significant at the 0.05 level. This suggests that, within this dataset, these factors do not have a strong, consistent, and provable linear influence on lending rates compared to the other significant variables.

Regression Result

Regression analysis is essential to understand relationships between variables, particularly how one or more independent variables influence a dependent variable.In this research context, regression allows to move beyond just observing associations (as

in correlation) and measure the extent to which factors like deposit rates or inflation predict or affect lending interest rates, while controlling for other variables.Regression analysis is a quantitative research method that is used when the study comprises modeling and analyzing several variables. The study seeks to investigate the effect of financial factors (interest rate on deposits, impairment charges, operating and non-operating expenses) as independent variables and macroeconomic indicators (inflation and economic growth) as moderating variables on the lending rate of banks to customers.

Table 5   Model Summary of Independent Variables

Hypothesis	Regression weight	Constant	Unstandardized Beta	t-value	p-value	Results
H1	→ IRD LIR	1.572	$\beta_1 = 1.091$	3.952	0.029	Significant
H2	→ICR LIR		$\beta_2 = 0.324$	- 1.563	0.216	Insignificant
H3	→ OER LIR		$\beta_3 = 0.935$	1.859	0.160	Insignificant
H4	→NOER LIR		$\beta_4 = 35.774$	1.139	0.337	Insignificant

DV: Lending Interest Rates
Adjusted R^2 = 0.926 or 92.6%
F (4, 3) = 22.882
Sig.(p) = 0.014 (Significant)

a. Dependent Variable: Lending interest rate (LIR)
b. Predictors: Interest rate on deposit (IRD), Impairment charge rate (ICR), Operating expenses rate on loan (OER), Non-operating expenses rate on loan (NOER)

Overall Model Fit

Adjusted R² is 0.926 or 92.6%. This is a very strong indicator. It means that approximately 92.6% of the variation in "Lending Interest Rates (LIR)" can be explained by the independent variables included in this model (IRD, ICR, OER, and NOER). This suggests that the model is excellent at predicting or accounting for changes in lending interest rates.Sig.(p)= 0.014 (Significant): Since the p-value (0.014) is less than the conventional significance level of 0.05, the overall regression model is statistically significant. This means that at least one of the independent variables significantly predicts the lending interest rate, and the model as a whole is a good fit for the data.

H1: IRD (Interest rate on deposits) and LIR (Lending Interest Rates)

For every one-unit increase in the "Interest rate on deposit (IRD)", the "Lending

Interest Rate (LIR)" is predicted to increase by 1.091 units, holding all other variables constant. The p-value of 0.029 (less than 0.05) indicates that this relationship is statistically significant. This strongly supports H1, suggesting that deposit interest rates are a significant driver of lending interest rates. The "Constant" value of 1.572 seems to be associated with this specific regression output, representing the predicted LIR when all independent variables are zero.

H2: ICR (Impairment charge rate) and LIR (Lending Interest Rates)

While the beta suggests that for every one-unit increase in "Impairment charge rate (ICR)", LIR is predicted to decrease by 1.563 units, this relationship is not statistically significant as the p-value of 0.216 is greater than 0.05. Therefore, based on this model, changes in the impairment charge rate do not have a statistically significant linear impact on lending interest rates, contrary to what might be intuitively expected (where higher impairment charges might lead to higher lending rates to compensate for risk). This means we fail to reject H2 in the sense of finding a significant relationship as hypothesized.

H3: OER (Operating expenses rate on loan) and LIR (Lending Interest Rates)

For every one-unit increase in "Operating expenses rate on loan (OER)", LIR is predicted to increase by 1.859 units. However, this relationship is not statistically significant as the p-value of 0.160 is greater than 0.05. This suggests that, while there's a positive coefficient, the operating expenses rate on loans does not have a statistically significant linear impact on lending interest rates within this model. This means we fail to reject H3 for finding a significant relationship.

H4: NOER (Non-operating expenses rate on loan) and LIR (Lending Interest Rates)

The beta coefficient of 35.774 is quite large, suggesting that for every one-unit increase in "Non-operating expenses rate on loan (NOER)", LIR is predicted to increase by 35.774 units. However, this relationship is also not statistically significant as the p-value of 0.337 is much greater than 0.05. This indicates that the non-operating expenses rate on loans does not have a statistically significant linear impact on lending interest rates in this model, meaning we fail to reject H4.

Therefore, the primary driver of lending interest rates, according to this model, is the interest rate paid on deposits, reflecting how banks pass on their cost of funds. The other cost components, while likely factored into overall bank operations, do not show a statistically significant direct linear relationship with lending rates in this specific regression analysis.

Table 6   Model Summary of Moderating Variables

Hypothesis	Regression weight	Constant	Unstandardized Beta	t-value	p-value	Results
H5	$\longrightarrow$ INF LIR	8.379	$\beta_5 = 0.482$	2.714	0.042	Significant
H6	$\longrightarrow$ EGR LIR		$\beta_6 = 0.043$	0.437	0.680	Insignificant
			DV: Lending Interest Rates Adjusted $R^2 = 0.503$ or 50.3% F (2, 5) = 4.542 Sig.(p) = 0.075 (Significant)			

a. Dependent Variable: Lending interest rate (LIR)

b. Predictors: Inflation rate (INF), Economic growth rate (EGR)

Approximately 50.3% of the variance in Lending Interest Rates is explained by the independent variables in your model, namely INF (Inflation rate) and EGR (economic growth rate). While the p-value is just above the conventional threshold of 0.05, it's still often considered marginally significant, suggesting that the overall model has explanatory power, though borderline.

H5: INF (Inflation rate) → LIR (Lending interest rate)

Inflation has a statistically significant positive impact on Lending Interest Rates. A unit increase in inflation is associated with a 0.482 unit increase in lending interest rates, holding another variables constant. This supports hypothesis H5.

H6: EGR (Economic Growth Rate) → LIR (Lending interest rate)

 Economic Growth Rate does not have a statistically significant effect on Lending Interest Rates. The result is not enough to support hypothesis H6.

Major Findings

Normality Assumption Met The Shapiro-Wilk test yielded a p-value of 0.200, which is greater than 0.05, indicating that the lending interest rate data follows a normal distribution. This validates the use of parametric tests in your regression analysis.

No Multicollinearity Detected

All VIF values are below 4, and all tolerance values are above 0.25, confirming that multicollinearity is not a problem in your model. This enhances the stability and reliability of your coefficient estimates.

Interest Rates and Operating Expenses are Relatively Stable

Both lending interest rates (CV = 8.04%) and interest rates on deposits (CV = 9.01%) display low variability, reflecting consistency in interest rate behavior. This stability

may imply prudent monetary policy and predictable banking conditions during the reviewed years.

Deposit Rates Strongly Influence Lending Rates

There is a very high and statistically significant positive correlation (r = 0.945, p = 0.000) between the lending interest rate and the interest rate on deposits. This suggests that as deposit rates rise, lending rates also increase, highlighting the tight link between a bank's cost of funds and its pricing of loans.

Strong Overall Model Fit for Financial Factors

The model, including IRD, ICR, OER, and NOER, explains 92.6% of the variance in lending rates (*Adjusted R² = 0.926*), with a significant overall p-value of 0.014. This indicates a very high explanatory power of financial factors.

Deposit Rates are the Key Predictor of Lending Interest Rates

The interest rate on deposits (IRD) has a statistically significant positive effect on lending interest rates ($\beta = 1.091, p = 0.029$), supporting H1. Banks pass on the cost of funds to borrowers, making IRD a crucial determinant.

No Significant Effect of Impairment Charges

Although the impairment charge rate (ICR) has a negative beta coefficient ($\beta = -1.563$), its p-value is 0.216, so H2 is not supported. This implies it doesn't significantly influence lending rates in this model.

Operating and Non-Operating Costs Have No Statistical Impact

Both operating expenses (OER) and non-operating expenses (NOER) have insignificant p-values (0.160 and 0.337, respectively), indicating no strong linear relationship with lending interest rates; hence H3 and H4 are not supported.

Inflation Significantly Moderates Lending Rates

Inflation (INF) shows a significant positive effect on lending interest rates ($\beta = 0.482, p = 0.042$), supporting H5. This suggests that banks adjust their rates in response to inflationary trends.

Economic Growth Rate (EGR) is Not a Significant Moderator

Despite a slight positive coefficient, economic growth rate (EGR) does not significantly influence lending rates ($p = 0.680$), so H6 is not supported.

Conclusion

This study aimed to explore the determinants of lending interest rates in Nepalese commercial banks, using both financial factors and macroeconomic indicators. The results yielded several key insights.

Firstly, the interest rate on deposits emerged as the most influential financial factor, showing a significant positive effect on lending rates. This finding underscores the importance of banks' funding costs in interest rate-setting behavior. It confirms that as the cost of attracting deposits rises, banks adjust by increasing lending rates to maintain profitability.

Secondly, the regression model incorporating financial variables demonstrated a high level of predictive power, with an adjusted R^2 of 92.6%. This suggests that the selected financial variables robustly explain most of the variation in lending rates across the period studied. However, other cost components—such as impairment charges and operating/non-operating expenses—while logically linked to bank operations, did not show statistically significant direct effects. This may indicate that banks absorb or offset such costs through other mechanisms.

From a macroeconomic perspective, inflation was found to be a significant moderating variable, positively influencing lending rates. This aligns with central bank behavior, where interest rates are often adjusted to tame inflationary pressures. Conversely, economic growth, though moderately correlated with lending rates, was not a statistically significant predictor, possibly reflecting the indirect or lagged nature of GDP growth on bank interest policies.

In summary, the findings underscore that deposit interest rates and inflation serve as the key determinants influencing lending interest rates in Nepal's commercial banking sector. While operational and macroeconomic uncertainties do contribute to the financial ecosystem, their impact on lending rates may be more nuanced or indirect. These findings have significant implications for monetary authorities, banking strategists, and policymakers seeking to strike a balance between growth and stability in the financial sector.

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