

Impact of Interest Rate on Stock Price of Commercial Bank in Nepal

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Abstract

This study examines the Impact of Interest Rate on Stock Price of Commercial Bank in Nepal. Stock price is the dependent variables and the bank rate, deposit rate, base rate, lending rate and the risk-free rate of return (T-bills) is the independent variable of the study. The study is based on the secondary data of 10 out of 19 listed commercial banks in the NEPSE with 100 observations for the period cover from 2014/15 to 2023/24. The supplementary data on interest rate collection from published financial and statistical report by Nepal Rastra Bank (NRB), Ministry of finance and annual reports of the selected commercial banks. A descriptive and causal comparative methodology was adopted. Correlation, regression, analysis of variance (ANOVA), coefficient of regression was conducted to test the significance and impact of interest rate on stock prices in the context of listed commercial banks in NEPSE index. The study indicates that the deposit rate and stock price show statistically negative significant relationships. Likewise, the lending rate and stock price have a significant negative relationship. However, the bank rate, base rate and risk-free rate of return (T-bills), do not show statistically significant relationships with stock prices. Deposit rate and lending rate are the key to enhancing stock price. Banks with lower deposit rates tend to generate better stock returns for their shareholders, while higher deposit and lending rates can decrease stock prices. Policymakers and regulators should encourage banks to lower deposit and lending rates to boost stock prices. This approach could enable investors to achieve higher returns on their stocks if deposit and lending rates are reduced.

Key words: *Bank Rate, Deposit Rate, Base Rate, Lending Rate, T-bills Rate and Stock Price.*

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I. Introduction

The stock market in Nepal has a relatively short but significant history, starting with the establishment of the Securities Exchange Center (SEC) in 1976 to promote the capital market. Initially, SEC was the sole institution managing the market, facilitating limited trading in government and corporate securities without brokers or dealers. The Securities Exchange Act of 1984 aimed to create a systematic market and protect investor interests. In 1993, the SEC was transformed into Nepal Stock Exchange (NEPSE) Limited, marking the beginning of a full-fledged stock market. NEPSE has since played a vital role in mobilizing capital as an alternative to traditional banking, promoting economic growth. The Securities Board of Nepal (SEBON), established in 1993, regulates the stock market under the Securities Act of 2006. Even though it is still in its early

stages, Nepal's stock market has expanded dramatically since its founding.

According to the Nordin et al.(2014) the stock market significantly contributes to a country's economy growth and development. The stock market index is a common metric used to determine a country's economic growth Ali (2014). The stock market index is often watched as an indicator of economic growth and its rise in investor confidence and encouraging investment. However, rapid, unjustified increases can lead to instability, highlighting the need for policymakers to monitor developments and prevent market bubbles and collapses. Understanding the relationship between the stock market index and its driving factors is crucial, as these factors such as cash flow and discount rates have an impact depending on the country's economic characteristics.

Equity markets are vital for corporate efficiency, innovation, and long-term economic growth, offering capital for businesses and governments, particularly through privatization. They also serve as significant investment tools for individuals, especially as pension systems shift toward the private sector, making equities an integral part of the global economy

Interest rates, a key macroeconomic indicator, significantly impact economic growth by influencing borrowing and lending costs. Alam and Uddin (2009) specified that interest rates represent the cost of borrowing, while for lenders, they are the fees charged for lending. The relationship between interest rates and stock market performance is complex and has been widely studied globally. In Nepal, a rapidly developing economy with a growing financial market, understanding this dynamic is essential for investors, policymakers and financial analysts.

Nepal has situated between economic giants India and China, Nepal has experienced significant growth, expanded its financial sector and established its stock market as a vital economic indicator. Interest rates, determined by the central bank, play a critical role in shaping investment decisions and economic activity. Higher rates can increase borrowing costs, reduce corporate profitability and stock prices, while also attracting investors to fixed-income securities, potentially diverting funds from stocks.

In Nepal, this study examines the relationship between stock prices and interest rates using

data from 2014/15 to 2023/24, also considering the effects of interest rate changes. The findings aim to provide insights for policymakers, traders, researchers, and academics to better understand the determinants of the Nepalese stock market's performance.

This study tries to analyze how fluctuations of interest rates impact on stock prices of commercial bank performance in Nepal. The findings will offer insights for stakeholders navigating Nepal's evolving economic landscape.

This study answered the following key questions:

- Is there any relationship between bank rates, deposit rate, lending rate, base rate and risk-free rate of return (T-bills) on stock price?
- To examine the effect of bank rates, deposit rate, lending rate, base rate and risk-free rate of return (T-bills) on stock price?

Objectives of the study

The study's primary goal is to investigate the relationship between interest rates and the stock prices of Nepalese commercial banks in order to fulfill the particular objectives listed as below.

- To measure the relationship between bank rates, deposit rate, lending rate, base rate and risk-free rate of return (T-bills) on stock price?
- To examine the effect of interest rates, deposit rate, lending rate base rate and risk-free rate of return (T-bills) on stock price?

II. Literature Review

One of the core principles in financial theory regarding the relationship between interest rates and stock price performance is interest rate parity and its implications on capital flows and asset allocation. Fisher's theory of interest (1930) suggests that nominal interest

rates consist of a real interest rate plus expected inflation. When nominal interest rates increase, the cost of borrowing rises, reducing firms' capacity to expand and lowering future expected cash flows, which ultimately depresses stock prices. This inverse

relationship between interest rates and stock prices is supported by theories such as the Dividend Discount Model (DDM), where stock prices are considered the present value of expected future dividends. Higher interest rates increase the discount rate, thereby reducing stock valuations.

The Loanable Funds Theory of Interest posits that the interest rate is determined by the interaction between the supply and demand for loanable funds. The supply primarily originates from savings, while the demand arises from investments, government borrowing, and consumption financing. When the supply and demand of loanable funds are equal, the equilibrium interest rate is determined. Robertson (1934) highlights that the loanable funds theory bridges savings and investment decisions, with interest rates acting as the balancing mechanism in a competitive market. This theory integrates classical and neoclassical economic principles, emphasizing the role of savings and investment in interest rate determination.

Fama (1981) examined the relationship between macroeconomic factors, including interest rates, and stock returns. He found that stock prices are negatively related to interest rates, as higher interest rates increase the cost of borrowing and reduce future corporate earnings. Although the researcher's study was based on data from the U.S. market, the core idea that interest rates influence stock prices by affecting investment decisions is highly relevant to emerging markets like Nepal. In the context of Nepal, rising interest rates likely lead to lower stock market growth by increasing the cost of capital and reducing investor confidence, like researcher's findings

Chen, Roll, and Ross (1986) investigated the impact of various macroeconomic variables, including interest rates, on stock market returns. They found that interest rates have a significant negative impact on stock prices, as

higher interest rates lead to increased borrowing costs, reduced corporate profitability, and lower present values of future earnings. Although their researchers focused on the U.S. market, the findings provide a theoretical foundation for understanding the relationship between interest rates and stock prices in emerging markets like Nepal. In Nepal, rising interest rates likely dampen stock market growth by increasing the cost of capital and reducing investor demand for equities.

Campbell and Shiller (1988) developed a framework to explain the relationship between stock prices and interest rates, emphasizing the role of discount rates in determining stock price performance. They argued that rising interest rates increase the discount rate applied to future cash flows, leading to lower present values of stocks and, consequently, a decline in stock prices. Although their study was primarily focused on developed markets, the core idea that interest rates influence stock prices through discounting mechanisms is applicable to emerging markets like Nepal. In Nepal, increasing interest rates are likely to reduce stock market growth by making future earnings less valuable in present terms, which can depress stock prices.

Bashir and Hassan (1997) examined the relationship between stock returns and interest rate sensitivity in the UAE. The study showed indications that the stock returns of commercial banks in the country demonstrate a level of sensitivity to fluctuations in interest rates. The study also discovered a long-run negative association between long-term interest rates and stock values, but only in the United States.

Ologunde et al. (2006) investigated the relationships between Nigeria's stock market capitalization rate and interest rates. The study found that the present interest rate has a

beneficial influence on the stock market capitalization rate. The research also found that both the present interest rate and the government's development stock rate have a negative impact on stock price capitalization rates.

Mishra (2008) explored the sensitivity of stock markets in emerging economies, including Nepal, to interest rate fluctuations. The findings revealed that the Nepalese stock price is particularly vulnerable to interest rate changes, with rising rates leading to significant declines in stock prices. This is attributed to the limited liquidity and high reliance on interest-sensitive sectors in the Nepalese economy.

Assefa et al. (2017), through a panel data analysis, investigated the relationship between stock returns and interest rates across various countries. Their study revealed that in developed economies, economic slowdowns and declining interest rates significantly and negatively impacted stock returns.

KC (2023) measures an economy's performance, with growth in the index indicating confidence in the economy's prospects and encouraging investment. However, a sudden and unchecked rise in the index can be cause for concern as it may not be supported by fundamental factors and can ultimately lead to a decrease in the index, endangering the stability of the financial and economic systems.

The study attempts to examine the impact of interest rates on stock prices in the context of Nepalese listed companies and it showed that deposit interest rate, lending interest rate, base rate has a negative effect on stock price and stock return. Similarly, bank rates and inflation rates have positive effects on stock prices and stock returns. Moreover, the researchers concluded that the base rate followed by deposit interest rate is the most

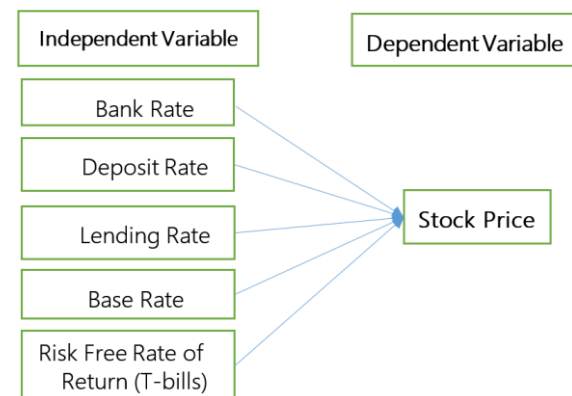
influencing factor that affects the stock price in the context of listed companies in NEPSE.

The primary goal of the study is to examine how interest rates affect the stock market in relation to listed Nepalese companies. Specifically, it examines the relationship between bank rate, deposit interest rate, base interest rate lending interest rate and risk-free rate of return (T-bills) with stock price and stock return in the context of Nepalese listed companies

The theoretical framework provides a belief in relationships between different dependent on and independent variables in this study. The independent variable is bank rate, deposit rate, base rate, lending rate and risk-free rate of return (T-bills) whereas, stock price of commercial bank is the dependent variables of the study. The below figure 1 theoretical framework helps to identify relevant concepts and relationship between these variables.

Figure 1

Theoretical framework



Note: Note. Adopted form (Alam & Uddin 2009 & KC 2023)

Dependent Variable

A stock price refers to the current market value of a company's Stock. It denotes the price at which buyers and sellers agree to trade the Stock on the stock market. The stock price is influenced by a range of factors, including a company's financial performance, market conditions, investor sentiment, and broader economic trends. According to Gitman and

Zutter (2015), a stock price is the price of a single Stock of a company's stock at a specific time in the market, reflecting the public perception of the company's value and futures prospects. Similarly, Fabozzi et al. (2002) defines a stock price as the present value of expected future cash flows derived from the stock, discounted at an appropriate rate. The stock prices are not only determined by the company's current performance but also by market expectations for its future growth and profitability.

Independent Variable

The bank interest rate is a critical component of the financial system. This is the rate banks charge on loans, including personal loans, mortgages, car loans, and business loans. It is set by central bank of Nepal based on various economic factors such as inflation, central bank policies, and market demand for credit. Moreover, the deposit interest rate that a bank pays to depositors for keeping their money in savings accounts, fixed deposits, or other types of deposit accounts. It represents the return on investment for individuals who save their money in a bank. The bank rate depends on the type of deposit, the amount of money deposited, and the duration of the deposit.

III. Research Methodology

The study employed both a descriptive and a causal-comparative research design. The study is based on the secondary data which was collected from the 10 out of 19 listed commercial banks in NEPSE for the study period of 2014/15 to 2023/24 with a 100-sample observation. The researcher used convenient sampling method in the study. The supplementary data on interest rate collected from published financial and statistical report by Nepal Rastra Bank (NRB), Ministry of finance and annual reports of the selected commercial banks webpages. The study used a panel data approach to

Furthermore, the base rate is the interest rate set by the central bank in Nepal as the minimum rate at which it lends money to commercial banks. It is also the minimum interest rate at which a commercial bank is allowed to lend money to its customers. The base rate ensures that banks cover their costs and maintain profitability while setting fair and transparent lending rates. The base rate, commonly known as the benchmark interest rate. Additionally, Lending interest rates are a vital component of the financial system; Lending rates, the interest rates charged by financial institutions on loans, are influenced by a complex interplay of factors that affect both the cost of borrowing and the broader economy. key factors determine lending rates, including operating costs, non-performing loans, and the other cost and macroeconomic factors also play a significant role in shaping lending rates. In addition, the risk-free rate of return (T-bills) is a key concept in finance, representing the theoretical return on an investment with zero risk of financial loss. This rate is crucial for various financial models and investment decisions, serving as a baseline for evaluating the performance of other investments and understanding the trade-off between risk and return.

tabulating, analyzing the data, focusing on exploring relationships and causal effects between variables. Correlation, regression, analysis of variance (ANOVA), coefficient of regression were models to perform.

The acquire data was statistically examined by using MS excel and SPSS software. The following model is developed to the data analysis tools:

$$\text{Stock Price} = \alpha + \beta_1 \text{bankrate} + \beta_2 \text{depositrate} + \beta_3 \text{baserate} + \beta_4 \text{endingrate} + \beta_5 \text{T-bills} + E$$

IV. Data Analysis and Interpretation

Descriptive Statistics

Descriptive statistical analysis of variables involves summarizing and organizing the key features of a dataset to understand its main characteristics. This analysis focuses on providing a clear and concise overview of the variables under study without making any

inferences or predictions. It helps in identifying patterns, distributions, and variations in the data, which can be further explored in inferential analyses. It is used to describe the relationship between variables and interpretation of the result.

Table 1

<i>Descriptive Statistics analysis of the variables</i>					
Variable	Obs.	Minimum	Maximum	Mean	Std. Deviation
Stock Price	100	160.08	3001.27	681.58	619.42
Bank Rate	100	5.00	8.00	6.80	1.01
Deposit Rate	100	3.28	7.86	5.65	1.49
Base Rate	100	6.54	10.47	8.76	1.29
Lending Rate	100	8.43	12.47	10.74	1.39
T-bills	100	0.49	8.91	3.50	2.60

Note. Author's Calculation by SPSS software

In the above table, the dependent variable is stock price which has Mean value 681.58 with standard deviation of 619.42 and which ranges from minimum value of Rs 160.08 and maximum Rs 3001.27 i.e., it means that average stock price of ten Commercial banks for the period ten years which has minimum Rs160.08, and maximum value is 3001.27.

Similarly, in the case of independent variables, Bank rate has the mean value of 6.8 and a standard deviation of 1.01 % which ranges from a minimum value of 5% to maximum value of 8%. Similarly, the deposit rate is presented with the mean value of

5.65%, and a standard deviation of 1.49%, which ranges from a minimum value of 3.28% to a maximum value of 7.86%. Likewise, the base rate is presented with the mean value of 8.76%, and standard deviation of 1.9% which ranges from a minimum value of 6.54 % to a maximum value of 10.47 %. Furthermore, the lending rate is presented with the mean value of 10.74%, and standard deviation of 1.39% which ranges from a minimum value of 8.43 % to a maximum value of 12.47 %. Likewise, T-bills rate shows the mean value of 3.5 %, and a standard deviation of 2.60% and the value ranges from a minimum of 0.49% to maximum of 8.91%.

Correlation - Correlation is a statistical term that describes the strength and direction of a

link between two variables. It identifies relationships between variables.

Table 2 - Analysis of Correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) Bank Rate	1					
(2) Deposit Rate	-0.092	1				
	0.364					

(3) Base Rate	.252*	.846**	1			
	0.011	0.000				
(4) Lending Rate	.335**	.823**	.967**	1		
	0.001	0.000	0.000			
(5) T-bills	-.393**	.505**	0.167	0.102	1	
	0.000	0.000	0.097	0.311		
(6) Stock Price	0.156	-.568**	-.394**	-.394**	-.425**	1
	0.121	0.000	0.000	0.000	0.000	
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Note: Author's calculation by SPSS software

Table 2 illustrates the bivariate Pearson correlation coefficient between dependent and independent variables. The dependent variables are stock price, and the independent variables are the bank rate, deposit rate, lending rate, base rate and risk-free rate of return (T-bills). Correlation analysis has been performed in the study to analyze relationship among the study variables. As stated at the bottom of the table, the single asterisk sign (*) indicates that correlation is significant at the 0.05 Levels or 95 percent confidence level. In the above table a correlation analysis of different variables has been done. At the significant level of 95% confidence level, the variables Lending Rate, T-bills rate, base rate and Stock price have a significant positive correlation with Bank Rate. Which is symbolized by Single asterisk (*) sign with 95% confidence level. Another variable Deposit Rate has significant positive correlation with Lending Rate, T-bills Rate, Base Rate and Stock price that is symbolized by also single asterisk (*) with 95% confidence level. Similarly, Lending Rate has a significant positive correlation with T-bills Rate, Base Rate and Stock price which is symbolized by single asterisk (*) at 95%

confidence level. Likewise, another variable T-bills Rate has a significant positive relationship with Base Rate and stock price that is symbolized by Single asterisk (*) with 95% confidence level. And the Base rate has a significant positive relationship with Stock price with p-value 0.000.

Regression

Regression analysis is a set of statistical methods used for the estimation of the relationship between a dependent variable and one or more than one independent variables. It can be used to determine the strength of a link between variables as well as to model the future relationship. In this analysis, stock prices are the dependent variables, and bank rate, deposit rate, lending rate, base rate and risk-free rate of return (T-bills) are independent variables. The regression analysis has been computed to analyze the impact of interest rate on price of commercial bank in Nepal. Moreover, even if a correlation coefficient shows that two variables have a strong link it is impossible to identify how exactly those variables have related to each other. The study's various multiple regression models and their result are presented below.

Table 3 - Analysis of Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.737 ^a	0.652	0.6335	0.24958
a. Predictors: (Constant), T-bills , Lending Rate, Bank Rate, Deposit Rate, Base Rate				

b. Dependent Variable: stock price

Note. Model summaries calculated from SPSS software

Table 3 summarizes the results of a regression model (Model 6) analyzing the impact of various predictors (bank rate, deposit rate, base rate, lending rate and T-bills) on the stock price of commercial banks. The R (Correlation Coefficient) value of 0.737^a indicates a moderate positive correlation between the predictors and the dependent variable that indicates a good level of prediction. The R Square (Coefficient of Determination) value of 0.652 implies that 65.2% of the variation in stock price can be explained by the predictors in the model and remaining explained by the other factors.

Similarly, The Adjusted R Square value is 0.6335, which means 63.35% variation in market price as stock is explained by different factors after adjusting the degree of freedom (df). The Standard Error of the Estimate value of 0.24958 represents the average distance that the observed stock price of commercial banks deviates from the regression line, is 0.24958 which indicates the accuracy of the model's predictions. The model demonstrates a moderate ability to explain the variation in stock price of commercial banks based on the predictors given.

Table 4 - Analysis of Variance of (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.315	5	0.663	10.643	.000 ^b
	Residual	5.855	94	0.062		
	Total	9.170	99			
a. Dependent Variable: stock price						
b. Predictors: (Constant), T-bills , Lending Rate, Bank Rate, Deposit Rate, Base Rate						

Note. Table analysis calculated from STATA software

Table 4 summarizes the Analysis of Variance (ANOVA) for Model 7, which examines the relationship between stock price (dependent variable) and the predictors (T-bills, Lending Rate, Bank Rate, Deposit Rate, and Base Rate). The regression sum of squares (3.315) represents the portion of the total variation in stock price explained by the predictors and the residual sum of squares (5.855) indicates the variation in stock price not explained by the predictors.

The F-value of 10.643 measures the overall significance of the regression model. It indicates the ratio of the variance explained by

the model to the unexplained variance. The processed data which is the population parameters had a significant level of 0.000^b% which shows the data is ideal for making a conclusion on the population's parameters as the p-value is highly significant ($p < 0.05$), indicating that the predictors collectively have a statistically significant relationship between the stock price and the predictors. As a result, the independent variables are highly significant in explaining the variance in market price per stock. In other words, the F-value proved that there is a significant relationship between the stock price of commercial banks and the predictors.

Table 5 - Analysis of regression result with the independent variables

Variables	Coef.	St. Err.	t-value	p-value	Sig
Bank Rate	0.0220	0.0370	0.6100	0.5420	

Deposit Rate	-0.1280	0.0550	-2.3200	0.0230	**
Base Rate	0.1010	0.0810	1.2500	0.2150	
Lending Rate	-0.1430	0.0870	-4.2200	0.0480	**
T-bills Rate	-0.0130	0.0150	-0.9100	0.3650	
Constant	3.1350	0.2730	11.4700	0.0000	***
R-squared		0.652			
Adjusted R square		0.6335			
F-test		35.22			
Prob(F-statistic)		0.000			
*** $p<.01$, ** $p<.05$, * $p<.1$					

Model analysis calculated from SPSS software

Table 5 analyzes the regression results of the relationship between stock prices of commercial banks of Nepal and independent variables, including bank rate, deposit rate, base rate, lending rate, and T-bills rate. Based on the analysis of the above table, the bank rate coefficient is positive (0.022), but the p-value (0.542) or 54.20% indicates that it is statistically insignificant, suggesting that the bank rate has no significant effect on stock price of commercial bank in Nepal.

The deposit rate coefficient is negative (-0.128), with a p-value of 0.023 (2.3%), which indicates statistical significance. This suggests that the deposit rate has a negative significance impact on stock prices in Nepal. The deposit rate plays a key role in the increase or decrease in the stock price of commercial banks in the country.

Moreover, the base rate coefficient is positive (0.101), but the p-value (0.215) indicates an insignificant relationship. This means the base rate does not significantly impact stock prices and the lending rate coefficient is negative (-0.143) and p-value is 0.048 or 4.8% at the 5% level. This suggests that the lending rate has a

negative significance impact on stock prices in Nepal. The lending rate plays a key role in the increase or decrease in stock prices in the country. Lastly, The T-bills coefficient is slightly negative (-0.013), but the p-value is 0.365. that's shows insignificance, indicating no meaningful effect on stock prices.

The overall R-squared is 0.625, which means that 62.5% of the variation in stock prices is explained by the independent variables. The Adjusted R-squared is 0.6335, which explains the number of predictors and still indicates a reasonable fit for the model. The overall model is statistically significant with an F-test value of 35.22.

Due to autocorrelation between the independent variables, the integrated results in the above table are affected. Independent variables are the primary factors or conditions being analyzed to determine their influence on the dependent variable. These variables are manipulated or observed to evaluate their impact on the outcomes. As a result, the base rate and T-bills in the combined results have been negative which is influenced by these independent variables.

Table 6 - Hypothesis testing table

Hypotheses	P-value	Remarks
H ₁ : There is significant impact of bank rate on stock price in commercial bank in Nepal	0.542	Rejected
H ₂ : There is significant impact of deposit rate on stock price in commercial bank in Nepal	0.023	Accepted

H ₃ : There is significant impact of base rate on stock price in commercial bank in Nepal	0.215	Rejected
H ₄ : There is significant impact of lending rate on stock price in commercial bank in Nepal	0.048	Accepted
H ₅ : There is significant impact of risk-free rate of return(T-bills) on stock price commercial bank in Nepal	0.365	Rejected

From the above table 6, it shows hypothesis tested result based on the multiple regression model.

Since the p- value of the regression coefficient of bank rate is 0.542, and coefficient is positive 0.022 suggests that (H₁) is rejected. So, it can be concluded that there is a positive but insignificant impact on the stock price of commercial banks in Nepal. If there is an increase or decrease in the bank rate there is no impact on the stock price.

Similarly, the p-value of the regression coefficient for the deposit rate is 0.023, and the coefficient is -0.128, indicating that (H₂) is accepted. This implies that the deposit rate has a negative and substantial effect on Nepal's commercial banks' stock prices. Specifically, a 1% change in the deposit rate leads to a 2.3% change in the stock prices of commercial banks. A study conducted by KC (2023) also attempted that the deposit interest rate has a negative and significant impact on the stock prices of commercial banks in Nepal.

Additionally, Since the p- value of the regression coefficient of base rate is 0.215, and coefficient is positive 0.101 suggest that

(H₃) is rejected. So, it can be concluded that there is a positive but insignificant impact on the stock price of commercial banks in Nepal. If there is an increase or decrease in the base rate there is no impact on the stock price.

Moreover, Similarly, the p-value of the regression coefficient for the lending rate is 0.048, and the coefficient is -0.143, indicating that (H₄) is accepted. This suggests a negative and significant impact of the lending rate on the stock prices of commercial banks in Nepal. Specifically, a 1% change in the deposit rate leads to a 4.8% change in the stock prices of commercial banks. A study conducted by KC (2023) also attempted that the lending interest rate has a negative but significant impact on the stock prices of commercial banks in Nepal. Furthermore, the p-value of the regression coefficient of risk-free rate (T-bills) is 0.365, and coefficient is negative -0.013 suggest that (H₅) is rejected. So, it can be concluded that there is a negative coefficient but insignificant impact on the stock price of commercial banks in Nepal. If there is an increase or decrease in the risk-free rate (T-bills) there is no impact on the stock price.

V. Discussion

The study focuses on the impact of interest rate on the stock price commercial banks in Nepal. It tries to show the degree of impact of independent variables such as bank rate, deposit rate, base rate, lending rate, risk-free rate of return (T-bills). Five hypotheses were formulated based on independent variables and dependent variables, i.e., stock price.

Some variables were found to be negatively significant with stock prices and some found to be negatively insignificant with stock prices and some independent variables found to have an insignificant impact on stock prices.

The First hypothesis indicated that there is an insignificant negative impact on stock prices. It led to no relationship between stock price

and Bank rate of commercial banks. The second hypothesis indicated that there is a significant negative impact on stock prices. It indicates that when the deposit rate decreases the stock price increases. The study conducted by KC(2023) also supported this hypothesis and found that deposit rate has a negative impact on stock prices. Lin(2020) found that the interest rate on bank deposit has negative impact on the stock price, which is support in this study.

VI. Conclusion

The major conclusion of the study is that deposit rate and lending rate have a negative significant impact on stock price of commercial bank in Nepal. Similarly, the bank rate, base rate and risk-free rate of return (T-bills) has an insignificant relationship with the stock price which means there is not any impact on the stock price. Moreover, the study

The third hypothesis indicated that there is a negative insignificant impact on stock prices. It shows that there is no relationship between the base rate and stock price. The fourth hypothesis indicates that there is a negative impact lending rate to the stock price or when lending rate is decreasing stock price is increase or when lending rate increases the stock price decrease. KC(2023) and Ngugi(2014) also supported this study. He also found the lending interest rate has a significant negative impact on stock prices.

concludes that the deposit rate and lending rate played crucial role in influencing stock price of commercial bank in the context of listed stock in NEPSE. The study also concluded that deposit interest rate followed by lending rate is the most influence factor that affects the stock price of commercial bank in Nepal.

VII. Reference

- Alam, M. M., & Uddin, G. (2009). Relationship between interest rate and stock price: Empirical evidence from developed and developing countries. *International Journal of Business and Management*, 4(3), 43-51.
- Ali, H. (2014). Impact of interest rate on stock market; evidence from Pakistani market. *IOSR Journal of Business and Management*, 16(1), 64-69.
- Assefa, T. A., Esqueda, O. A., & Mollick, A. V. (2017). Stock returns and interest rates around the world: A panel data analysis. *Research in International Business and Finance*, 41, 564–579
- Bashir, A., & Hassan, A. (1997). Interest rate sensitivity and stock returns in the United Arab Emirates. *Journal of King Saud University*, 9(11), 79-89.
- Campbell, J. Y., & Shiller, R. J. (1988). Stock prices, earnings, and expected dividends. *The Journal of Finance*, 43(3), 661-676.
- Chen, N. F., Roll, R., & Ross, S. A. (1986). Economic forces and the stock market. *Journal of Business*, 383-403.
- Fabozzi, F. J., Modigliani, F., & Jones, F. J. (2002). *Foundations of Financial Markets and Institutions*. Pearson.
- Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *American Economic Review*, 71(4), 545-565.
- Fisher, I. (1930). *The theory of interest as determined by impatience to spend income and opportunity to spend it*. Macmillan.
- KC, B. (2023). Impact of Interest Rate on Stock Market in Nepal.
- L Ngugi, E. N. (2014). *Effects of lending rates on share prices of commercial banks quoted in the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- Lin, L. (2020). Bank deposits and the stock market. *The Review of Financial Studies*, 33(6), 2622-2658.

- Mishra, P. (2008). Stock market volatility and interest rate sensitivity in emerging markets: The case of Nepal. *Journal of Emerging Market Finance*, 7(2), 129-148.
- Nordin, N., Nordin, S., & Ismail, R. (2014). The impact of commodity prices, interest rate and exchange rate on stock market performance: An empirical analysis from Malaysia. *Malaysian Management Journal*, 18, 39-52.
- Ologunde, A. O., Elumilade, D. O., & Asaolu, T. O. (2007). Stock market capitalisation and interest rate in Nigeria: A time series analysis. *Economic and Policy Review*, 13(2), 101-118.
- Robertson, H. P. (1934). An indeterminacy relation for several observables and its classical interpretation. *Physical Review*, 46(9), 794.