

IMPACT OF INTEREST RATES ON FINANCIAL ASSETS

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**Impact of Interest Rates on Financial Assets**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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REPORT OF RESEARCH COMMITTEE

Ms. Archana Purkuti has defended research proposal entitled “**Impact of Interest Rates on Financial Assets**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Dr. Binita Manandhar and submit the thesis for evaluation and viva voce examination.

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APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled “**Impact of Interest Rates on Financial Assets**” presented by Ms. Archana Purkuti for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

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ABBREVIATIONS

BLC	:	Bank Lending Channel
CA	:	Correlation Analysis
CCB	:	Consumer Credit Behavior
DIR	:	Deposit Interest Rate
EBL	:	Everest Bank Limited
FD	:	Financial Data
FMR	:	Financial Market Risk
GBS	:	Government Bond Strategy
HBL	:	Himalayan Bank Limited
IA	:	Inferential Analysis
IRS	:	Interest Rate Spread
LIR	:	Lending Interest Rate
LnLA	:	Natural Logarithm of Loans and Advances
NABL	:	NIC Asia Bank Limited
NPL	:	Non-Performing Loans
NRB	:	Nepal Rastra Bank
NSBL	:	Nepal SBI Bank Limited
PBL	:	Prabhu Bank Limited
RA	:	Regression Analysis
ROA	:	Return on Assets
SPSS	:	Statistical Package for the Social Sciences

ABSTRACT

This research investigates the effect of interest rates on the financial assets of commercial banks in Nepal, considering Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR) as independent variables while Return on Assets (ROA) and Loans and Advances (LnLA) serve as dependent variables. The study employs a descriptive and causal-comparative design, analyzing data from five major banks: Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd., and Prabhu Bank Ltd., over the period 2013/14 to 2022/23. Secondary data sources include annual reports, publications by Nepal Rastra Bank, and other financial documents. Descriptive statistics and inferential methods, such as correlation and regression analysis via SPSS Version 29, were utilized to examine the relationships between variables. The correlation analysis reveals that LIR and DIR have weak negative correlations with ROA, suggesting that an increase in these rates slightly reduces profitability, though the results are not statistically significant. ISR demonstrates a weak positive correlation with ROA, which is also not statistically significant. For LnLA, DIR exhibits a strong positive and statistically significant correlation, indicating that higher deposit interest rates are associated with increased loan growth, whereas LIR and ISR show weak and insignificant correlations with loan growth. Regression Model 1 indicates that LIR negatively affects ROA, while DIR and ISR show no significant influence. This model explains only a small fraction of the variation in ROA. Regression Model 2 reveals that LIR negatively affects loan growth, while DIR positively impacts loan growth, with ISR showing no significant effect. This model accounts for a larger proportion of the variation in loan growth, emphasizing a stronger relationship between interest rates and lending activities.

Keywords: *Lending Interest Rate, Deposit Interest Rate, Interest Spread Rate, Return on Assets, Loans and Advances*

CHAPTER – I

INTRODUCTION

1.1 Background of the study

Interest rates serve as a cornerstone in determining the value and performance of financial assets within an economy, functioning as a key tool for implementing monetary policy. By affecting borrowing costs, investment choices, and overall economic activities, interest rates have a direct influence on the financial assets managed by institutions, particularly commercial banks, which depend on these assets for generating revenue and maintaining liquidity. Financial assets, such as loans, bonds, securities, and other instruments, are closely tied to interest rate fluctuations, with even minor changes significantly impacting their valuation, income potential, and associated risks. For example, higher interest rates can diminish the market value of fixed-income securities, increase loan defaults, and raise borrowing costs, whereas lower rates often boost asset valuations but may compress interest margins. The dynamic relationship between interest rates and financial assets is grounded in well-established economic theories, including the Fisher Effect and Loanable Funds Theory, and carries profound implications for the banking sector's profitability, financial stability, and role in driving broader economic growth (Mishkin, 2019). Grasping this relationship is vital for optimizing asset management, mitigating risks, and ensuring sustainable financial performance in a constantly evolving economic landscape.

Interest rates are a fundamental instrument of monetary policy utilized by central banks to regulate economic conditions, whether aiming to control inflation, foster growth, or curb excessive economic expansion (Bernanke & Blinder, 1992). Changes in interest rates affect the demand and supply of credit, thereby exerting a substantial influence on the financial performance and stability of commercial banks. Higher interest rates increase borrowing costs, which discourages loan demand from businesses and individuals. Since loans constitute a major source of revenue for banks, reduced demand for loans can lead to lower interest income and a potential decline in profitability (Fama, 1985). Conversely, lower interest rates make borrowing more accessible, stimulating loan demand and increasing lending activity. However,

these reductions also result in lower returns on interest-bearing assets, such as government securities and corporate bonds, which are vital components of banks' investment portfolios. This dual impact of interest rate fluctuations highlights their critical role in shaping the revenue streams and financial stability of commercial banks, necessitating a delicate balance to achieve optimal economic outcomes (Stiglitz & Weiss, 1981).

In Nepal, commercial banks play a dominant role in the financial system, making them highly vulnerable to changes in interest rates (Nepal Rastra Bank, 2020). As the central bank, the Nepal Rastra Bank frequently modifies interest rates through its monetary policy to manage inflation and ensure economic stability. However, these rate adjustments significantly affect the financial assets of commercial banks. For example, an increase in the policy rate can diminish the profitability of banks' loan portfolios, as higher interest rates discourage borrowing. This decline in loan demand leads to reduced interest income, which constitutes a major source of revenue for banks (Gurung & Thapa, 2021).

Moreover, fluctuations in interest rates significantly affect the valuation of banks' investment portfolios. Commercial banks often hold substantial amounts of government securities, which decrease in value when interest rates rise, resulting in potential capital losses (Bekaert et al., 2001). This inverse relationship between bond prices and interest rates means that as rates increase, the market value of existing bonds declines, reducing the overall worth of the bonds held by banks. As a result, changes in interest rates can profoundly impact the financial health of commercial banks and the stability of the broader financial system in Nepal.

An essential facet of interest rate dynamics is their influence on non-performing assets (NPAs), which refer to loans that borrowers fail to repay on time or in full. Higher interest rates increase borrowing costs, potentially causing financial strain for borrowers and raising the risk of loan defaults. Consequently, commercial banks may face a rise in NPAs, which can erode profitability and weaken their financial stability (Espinoza & Prasad, 2010). Elevated NPAs also necessitate higher provisioning, reducing the funds available for lending and investment, thereby hindering the growth of the banking sector. In Nepal, the link between rising interest rates and escalating

NPAs has emerged as a significant concern, posing threats to the banking industry's stability and resilience. The ongoing increase in NPAs due to higher interest rates highlights the critical need for robust risk management strategies and policy interventions to protect the sector's financial health and promote sustainable economic development (Shrestha, 2022).

The effect of interest rates on financial assets extends beyond loans and bonds, influencing the interbank lending market, where banks borrow and lend to each other, usually for short-term needs. When interest rates raise the cost of borrowing in the interbank market increases potentially leading to liquidity challenges for some banks especially smaller institutions (Freixas & Rochet, 2008). These liquidity constraints may compel banks to liquidate financial assets at unfavorable prices, resulting in potential losses. In Nepal, this scenario has been evident during periods of tight monetary policy, where smaller banks have struggled to maintain sufficient liquidity (Nepal Rastra Bank, 2021).

Beyond their impact on financial performance, changes in interest rates also shape banks' strategic decisions concerning asset allocation. During periods of low interest rates, banks may reallocate their portfolios toward higher-yielding assets, such as corporate bonds or equities, to enhance returns (Acharya & Naqvi, 2012). However, this strategy increases exposure to risk, as these assets are typically more volatile and sensitive to market fluctuations. Conversely, when interest rates are high, banks are likely to prioritize holding safer, more liquid assets, such as government securities, despite their lower returns.

The interplay between interest rates and financial assets is shaped by prevailing macroeconomic conditions. During periods of economic expansion, rising interest rates are often accompanied by stronger loan demand and higher asset values, as businesses and consumers feel confident in their ability to repay loans (Taylor, 1993). In such scenarios, banks generally experience increased profitability driven by heightened credit activity, despite the higher borrowing costs. Conversely, during economic downturns, rising interest rates can intensify financial strain on borrowers and banks alike. Elevated borrowing costs may result in higher default rates, deteriorating asset quality, and reduced profitability due to a surge in non-performing

assets (NPAs) and declining asset values (Reinhart & Rogoff, 2009). This cyclical relationship highlights the critical need for effective management of financial assets and interest rate exposures to mitigate risks and maintain stability.

In Nepal, the relationship between interest rates and financial assets is further influenced by external factors, including remittance inflows and international capital flows (Shrestha & Chowdhury, 2020). For instance, high levels of remittance inflows can enhance domestic liquidity, leading to lower interest rates and heightened demand for financial assets. On the other hand, global interest rate hikes can result in capital outflows from emerging markets, which puts upward pressure on domestic interest rates and negatively impacts the financial assets of commercial banks (Kalemli-Ozcan, 2019). As a result, the effect of interest rates on financial assets must be analyzed in the broader context of both domestic and international economic factors.

Understanding the impact of interest rates on financial assets is of paramount importance, especially in a developing country like Nepal, where commercial banks play a central role in the financial system. Given the deep connections between the banking sector and the broader economy, shifts in interest rates can have significant effects on economic growth, financial stability, and the well-being of households and businesses (Mohan, 2006). This study explores how interest rate fluctuations impact the financial assets of commercial banks in Nepal aiming to offer insights for adapting asset management strategies. By exploring this relationship, the study will add to the existing knowledge on monetary policy, financial markets and banking in Nepal.

In conclusion, interest rates are a crucial factor influencing the performance of financial assets held by commercial banks. The relationship between interest rates and financial assets is complex, encompassing elements such as loan demand, asset valuations, liquidity, and broader macroeconomic conditions. In Nepal, where commercial banks are vital to the financial system, understanding the effects of interest rate changes on their financial assets is key to fostering financial stability and promoting sustainable economic growth. This study has provided an in-depth analysis of these dynamics, offering valuable insights for policymakers, financial institutions, and investors, including an exploration of how interest rates impact loans, advances, and the return on assets of commercial banks in Nepal.

1.2 Problem statement

Interest rates are essential for financial performance and stability, influencing borrowing costs, investment decisions, and asset valuations (Mishkin, 2019). While there is extensive research on the general impacts of interest rates, there remains a significant gap in understanding their specific effects on the financial assets of commercial banks in developing economies like Nepal (Kalemli-Ozcan, 2019). In Nepal, where commercial banks are central to the financial system, interest rate fluctuations can have a profound impact on profitability, asset valuations, and overall stability (Nepal Rastra Bank, 2020). The limited empirical research on this subject hinders informed decision-making by policymakers and financial institutions.

Interest rate changes have a direct effect on the value of financial assets such as loans, bonds, and securities. When interest rates rise, the value of fixed-income securities typically decreases, as existing bonds with lower yields become less attractive compared to newly issued ones offering higher returns (Fama, 1985). Moreover, higher interest rates can discourage borrowing, leading to a decrease in loan demand, which in turn affects banks' interest income (Bernanke & Blinder, 1992). This relationship is further shaped by macroeconomic factors like remittances and global economic conditions, which can either cushion or amplify the effects of interest rate fluctuations on financial assets (Shrestha & Chowdhury, 2020; Kalemli-Ozcan, 2019).

Review of previous literature reveals that numerous studies have been conducted regarding the impact of interest rates on financial assets. However, in the context of Nepal, especially regarding commercial banks, insufficient research has been found. Therefore, given these complexities, this study aims to fill the research gap by examining how interest rate fluctuations affect the financial assets of commercial banks in Nepal.

Research Questions

- What is the position of interest rates and financial assets of commercial banks in Nepal?
- Is there any relationship exist between interest rates with financial assets of commercial banks in Nepal?
- Do interest rates impact on financial assets of commercial banks in Nepal?

1.3 Objectives of the study

The main objective of the study is to assess the Impact of Interest Rates on Financial Assets of Commercial Banks in Nepal.

The study's objectives are outlined as follows:

- To assess the position of interest rates and financial assets of commercial banks in Nepal.
- To examine the relationship between interest rates with financial assets of commercial banks in Nepal.
- To analyze the impact of interest rates on financial assets of commercial banks in Nepal.

1.4 Rationale of the study

The study on "Impact of Interest Rates on Financial Assets of Commercial Banks in Nepal" is crucial for addressing a significant gap in existing literature regarding the relationship between interest rate fluctuations and the financial performance of Nepalese banks. Interest rates, as key determinants of economic activity, have a profound influence on various aspects of banking, such as borrowing costs, investment decisions, and asset valuations. While the effects of interest rates on banking performance are well established globally, the specific impact of variables like LIR, DIR and IRS on financial assets such as Return on Assets (ROA) and Loans and Advances (LA) in the context of Nepalese commercial banks has not been extensively explored. By examining these relationships, the study seeks to provide a more comprehensive understanding of how fluctuations in interest rates influence the financial stability, profitability and overall performance of Nepalese banks. This research is vital for policymakers and banking institutions, as it helps in the formulation of strategies to mitigate risks associated with interest rate volatility, optimize asset management practices, and strengthen the resilience of the financial sector. Furthermore, in a rapidly evolving economic environment, both domestically and globally, such insights are necessary for ensuring that banks can make informed, strategic decisions to maintain stability, improve financial performance, and contribute to sustainable economic growth. The findings will provide valuable guidance for navigating the complexities of interest rate changes while safeguarding the health of the banking system.

1.5 Limitations of the study

Similar to other studies, this research also has some limitations, which can be highlighted as follows:

- This study is concentrated on Impact of Interest rates on financial assets i.e. Return on Assets and Loan and Advances.
- Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd. and Prabhu Bank Ltd., have been taken for the study.
- This study is based on secondary data from various sources such as bank annual reports and financial documents.
- This study has employed descriptive and causal comparative research design with descriptive analysis, correlation analysis and regression analysis.
- The study covers data from the past ten years, specifically from FY 2013/14 to FY 2022/23.

CHAPTER – II

LITERATURE REVIEW

The purpose of this chapter is to review existing research in the chosen field and develop ideas for the research design. Previous studies are essential as they provide the foundation for the current study, ensuring continuity and context in the research process. This connection is established by linking the present study with past research, which helps in identifying gaps and opportunities for further exploration. To achieve this, various books, journals, and articles related to the topic have been thoroughly reviewed. The review has organized into two main sections: theoretical and empirical allowing for a structured and comprehensive examination of the relevant literature.

2.1 Theoretical review

The theoretical review for the thesis on "Impact of Interest Rates on Financial Assets of Commercial Banks in Nepal" involves analyzing relevant theories that provide a solid foundation for understanding the relationships between interest rates and financial assets. This review aims to establish the theoretical framework that underpins the investigation of how fluctuations in interest rates affect various financial performance metrics within the banking sector. By examining established theories, the research will gain a deeper understanding of the principles that govern the behavior of interest rates and their impact on the financial stability, profitability, and asset management of commercial banks. This section explores and investigates key theories of interest rates, which offer valuable insights into how these rates influence financial decisions and performance. While the application of these theories may vary across different contexts, they provide a comprehensive framework for understanding the role of interest rates in shaping economic behavior. Some of the key theories of interest rates include:

Interest Rate Risk Theory

Interest Rate Risk Theory (IRR) examines how changes in interest rates impact the value of financial assets, particularly those with fixed cash flows, such as bonds and loans. This theory is especially relevant for commercial banks, which typically hold substantial portfolios of fixed-income assets, including bonds and loans. When

interest rates rise, the market value of existing fixed-rate bonds and loans decreases because newer issues offer higher rates, making older bonds and loans with lower rates less attractive to investors. This depreciation in the value of these assets can significantly impact banks, leading to potential reductions in their asset base, altering balance sheets, and potentially undermining profitability. For Nepalese commercial banks, which are often exposed to interest rate fluctuations due to their reliance on fixed-income assets for revenue generation, understanding the dynamics of IRR Theory is crucial for managing financial stability. Conversely, when interest rates decrease, the value of these assets typically increases, as older bonds and loans with higher interest payments become more attractive relative to newly issued ones with lower rates. This increase in asset value can improve banks' financial positions and enhance profitability. Effectively managing interest rate risk allows banks to mitigate potential losses from market value fluctuations, optimize asset portfolios, and ensure stability in their financial operations, which is vital for sustaining long-term growth and profitability in a volatile economic environment (Jorion, 2007).

Duration Theory

Duration Theory is an essential concept in finance that assesses the responsiveness of a financial asset's price to fluctuations in interest rates. It is calculated as the weighted average time until an asset's cash flows are received. This measure is particularly vital for commercial banks, especially in Nepal, as it helps assess how their portfolios will respond to interest rate fluctuations. Assets with higher durations are more sensitive to changes in interest rates, meaning they experience greater price volatility. For instance, if a bank holds bonds with long durations, their value will decline sharply when interest rates rise, as the present value of their future cash flows diminishes. Conversely, when interest rates decrease, the value of these long-duration assets will increase due to the higher present value of the future cash flows. For Nepalese commercial banks, managing duration is essential to mitigate the risks associated with interest rate volatility. By carefully analyzing the duration of their asset and liability portfolios, banks can better align their assets and liabilities to minimize the adverse effects of interest rate fluctuations. This strategy allows banks to manage financial risks more effectively, stabilize their financial performance, and optimize their portfolio returns. A well-managed duration strategy can help Nepalese banks balance the competing interests of asset value appreciation and protection against rising

interest rates, thus enhancing long-term financial stability and profitability (McDonald, 2006).

Modigliani-Miller Theorem

The Modigliani-Miller Theorem provides a fundamental framework for understanding how interest rates influence a bank's capital structure and overall value. According to the theorem, in a perfect market without taxes or bankruptcy costs, the value of a firm remains unaffected by its capital structure, meaning the proportion of debt and equity in financing does not influence the firm's total value. However, this theory operates under the assumption of ideal market conditions, which rarely exist in the real world. In practical terms, interest rate changes have a significant impact on the cost of debt and equity financing. For Nepalese commercial banks, rising interest rates increase the cost of borrowing, making new debt more expensive and potentially reducing profitability, as higher interest payments on loans and debt obligations erode margins. Similarly, higher interest rates can affect the cost of equity, as investors may demand higher returns to compensate for the increased risk associated with rising interest rates. These changes in financing costs can influence a bank's capital structure decisions, as it may seek to adjust the mix of debt and equity to maintain financial stability and minimize costs. The Modigliani-Miller Theorem provides insights into how interest rate fluctuations impact capital structure and financial health, helping Nepalese banks optimize their financing strategies to adapt to rate changes and mitigate negative effects on profitability and valuation (Modigliani & Miller, 1958).

Expectations Theory of Interest Rates

The Expectations Theory of Interest Rates provides an essential framework for understanding how long-term interest rates are determined by the market's expectations of future short-term rates. According to this theory, long-term interest rates are essentially the average of expected future short-term rates, with the assumption that the market forms rational expectations about future interest rate movements. This theory is particularly relevant for commercial banks in Nepal, as it influences how they price and manage their long-term financial assets, such as loans, bonds, and securities. If the market anticipates that future short-term rates will rise, long-term interest rates will typically be higher, as investors demand a premium for locking in funds at a fixed rate over a longer period. This can impact the valuation of

long-term loans and bonds held by Nepalese banks, as higher long-term rates reduce the present value of the future cash flows associated with these assets. Conversely, if the market expects a decrease in future short-term rates, long-term rates will generally be lower, increasing the present value of long-term assets and potentially boosting the value of these financial instruments. By incorporating the Expectations Theory into their decision-making processes, banks in Nepal can better forecast how future interest rate changes will impact the valuation of their portfolios. This enables them to make more informed strategic decisions regarding asset pricing, risk management, and investment strategies. The theory also aids banks in managing interest rate risk by offering a clearer understanding of future rate movements and their impact on the financial assets held by banks (Campbell & Shiller, 1991).

Asset-Liability Management (ALM) Theory

Asset-Liability Management (ALM) Theory focuses on the strategic management of a bank's assets and liabilities to balance risks, particularly those arising from fluctuations in interest rates. In the context of Nepalese commercial banks, effective ALM is essential for ensuring financial stability, especially in an environment where interest rates can change rapidly and unpredictably. The core objective of ALM is to manage the bank's exposure to interest rate risk by aligning the maturities and cash flows of its assets and liabilities. One of the key techniques used in ALM is gap analysis, which helps to assess the mismatches between the interest rate-sensitive assets and liabilities over different time periods. By identifying these gaps, banks can take proactive steps to minimize the impact of interest rate movements on their financial position. Another important ALM technique is duration matching, which involves aligning the duration of a bank's assets and liabilities to reduce the sensitivity of the bank's net worth to interest rate changes. By ensuring that the cash flows from assets and liabilities are synchronized, ALM helps banks manage their interest rate risk, optimize profitability, and maintain sufficient liquidity to meet their obligations. For Nepalese commercial banks, implementing robust ALM strategies is crucial in navigating the challenges of interest rate volatility. Proper ALM practices allow banks to minimize potential losses from adverse interest rate movements while ensuring they have the liquidity to operate smoothly. In turn, this enhances their ability to remain financially sound and achieve long-term stability in an increasingly volatile economic environment (Fabozzi, 2002).

2.2 Empirical review

Lee et al. (2024) conducted an investigation into the effects of interest rates on corporate financing decisions, which is significant for business strategy and economic fluctuations. The objective was to assess the impact of varying interest rates on firms' capital structure, particularly the reliance on debt versus equity. Using meticulous panel data analysis across diverse companies, the study examined the relationship between the independent variable, interest rates, and the dependent variable, capital structure. The results indicated that higher interest rates prompted firms to shift their financing strategies toward equity rather than debt due to increased borrowing costs. The study concluded that interest rates significantly affect capital structure, influencing overall business growth and financial health. This provides valuable insights for corporate financial managers amid changing economic conditions.

Eggertsson et al. (2024) conducted a study on the bank lending channel of negative nominal policy rates. The objective was to analyze the effects of negative policy rates on bank lending behavior using Swedish data, including daily bank-level lending rates. The study examined the relationship between the independent variable, negative policy rates, and the dependent variable, bank lending behavior. The findings revealed that retail household deposit rates faced a lower bound, which weakened pass-through effects on mortgage lending rates and credit volumes. The study developed a banking sector model to assess the impact of negative policy rates in a general equilibrium context and identified conditions under which these rates were expansionary. It concluded that understanding negative policy rates is crucial for evaluating their effects on bank lending behavior and financial asset performance.

Mohammad Sadeghi et al. (2024) conducted a study on the impact of financial market risks on the value of financial assets in Iran. The objective was to identify key indicators of financial market risks, such as economic uncertainty, and assess their effects on asset values. The study focused on financial market risks as the independent variable and asset values as the dependent variable. Using the Analytic Hierarchy Process (AHP) for indicator selection and GARCH regression to calculate uncertainty indices, followed by VAR regression analysis, the research found that financial asset consumption increased in response to stock index uncertainty over time, while economic growth uncertainty led to a decline. Stock market profits initially remained

unaffected by stock uncertainty but later experienced growth. The findings highlighted that uncertainties in the financial market have a significant and adverse influence on asset values, with stock market investments showing a particularly strong reaction.

Nguyen (2023) conducted a study on the influence of interest rates on consumer credit behavior, a topic of significance given economic volatility and changing monetary policies. The objective was to examine how fluctuations in interest rates, the independent variable, impacted consumer borrowing behavior, the dependent variable. Using survey data and advanced statistical analysis, the research found that lower interest rates encouraged increased borrowing, as consumers found loans more affordable. Conversely, higher interest rates were associated with a rise in loan defaults due to elevated repayment costs. The study emphasized that interest rates play a crucial role in shaping consumer borrowing patterns and repayment behavior, affecting financial stability and decision-making for lenders, policymakers, and the broader economy.

Beni et al. (2023) conducted the study on the effect of credit circulation, loan-to-deposit ratio (LDR), and interest rates on the return on assets (ROA) due to non-performing loans (NPL) in credit unions in Indonesia. The objective was to investigate the impact of outstanding credit, LDR, and loan interest rates on ROA concerning NPL. The independent variables of this study were credit circulation, loan-to-deposit ratio (LDR), and interest rates, and the dependent variable was return on assets (ROA). The study employed a quantitative method and path analysis for comprehensive data evaluation. The findings of the study revealed that LDR, NPL, and loan interest rates significantly impact ROA. The conclusion of the study emphasized the significant impact of credit circulation, LDR, and interest rates, highlighting these factors as crucial for enhancing financial performance and optimizing loan policies.

Mohammed et al. (2023) conducted a study on investor sentiments, economic policy uncertainty, US interest rates, and financial assets, examining their interdependence over time. The objective was to analyze how these factors interacted and influenced financial assets. The independent variables of this study were investor sentiment,

economic policy uncertainty, and US interest rates, while the dependent variable was financial asset performance. The research utilized a quantile VAR-based connectivity technique and wavelet multiple local correlations for data analysis. The findings indicated that investor sentiment played a crucial role in transmitting shocks, with effects varying under different market conditions. The study concluded that understanding these dynamics is vital for predicting financial asset performance in response to interest rate changes.

Garcia (2023) conducted an examination of the effect of interest rates on the performance of government bonds, important for both institutional and retail investors seeking stable returns in volatile markets. The objective was to analyze how changes in interest rates influenced bond yields and investment strategies. The independent variable of this study was interest rates, while the dependent variable was bond yields. Using a quantitative approach to analyze historical bond data and interest rate movements, the researcher found a clear inverse relationship: as interest rates increased, bond prices decreased, which resulted in a negative impact on bond yields. This prompted investor to adjust their portfolios to mitigate potential losses and reallocate assets more effectively. The study concluded that understanding interest rate trends is essential for effective bond investment strategies, highlighting the importance of monitoring interest rate forecasts to optimize financial decision-making and minimize risks.

Ali-Momoh and Fajuyagbe (2022) conducted a study on interest rates and the financial performance of listed deposit money banks in Nigeria. The objective was to investigate the effects of domestic money supply growth, maximum bank lending rates, monetary policy rates, and inflation rates on banks' financial performance. The independent variables of this study were domestic money supply and maximum lending rates, while the dependent variable was bank performance. Using ex-post facto analyses, the findings revealed positive and statistically significant relationships between domestic money supply and financial performance, as well as between maximum lending rates and performance. The study concluded that interest rate liberalization positively impacted bank performance and recommended effective interest rate management and the use of monetary policy tools to improve performance and loan applications.

Khan et al. (2022) conducted a study on the impact of liquidity on asset returns in Pakistan and the United Kingdom. The objective was to explore how liquidity influences stock returns in these markets. The independent variable of this study was liquidity, while the dependent variable was stock returns. The analysis included data from 60 companies (30 from each country). The findings indicated that illiquidity negatively affected stock returns in Pakistan, while interest rates and HML (high minus low) positively influenced returns. In the UK, illiquidity had an insignificant effect, but book-to-market, SMB (small minus big), HML, interest rates, and GDP significantly impacted returns. The study concluded that liquidity is vital for investors in Pakistan, with differing dynamics observed in the UK market.

Brown et al. (2022) conducted a study on the relationship between interest rates and real estate investment returns across geographic markets. The objective was to determine the changes in interest rates affect property values and rental yields. The independent variable of this study was interest rates, while the dependent variable was property values. Using robust regression analysis on extensive datasets, the researchers found that increases in interest rates negatively impacted property values and decreased rental yields due to higher financing costs, which reduced demand in the housing market. The study concluded that real estate investors should monitor interest rate trends to make informed investment decisions and understand broader economic indicators that influence real estate performance.

Turvey (2022) conducted a study on interest rates and asset prices. The objective of the study was to analyze interest rates roles in determining asset prices using simple assumptions. The independent variable of this study was interest rates, while the dependent variable was asset prices. The methodology involved aggregative and measurable variables, applicable to both government securities and real assets. The findings suggested that interest rates significantly influence asset prices and can be effectively explained through the proposed theory. The conclusion emphasized the importance of understanding this relationship for financial market analysis and informed investment decisions, while also discussing the role of financial intermediaries and re-evaluating the determinants of the transactions demand for money.

Smith and Johnson (2021) conducted a study on the impact of interest rates on the stock market performance of technology firms, focusing on a sector known for rapid growth and volatility. The objective was to assess how fluctuations in interest rates influenced stock prices and investor behavior. The independent variable of this study was interest rates, while the dependent variable was stock prices. A mixed-methods approach was used, including quantitative analysis and qualitative interviews. The findings revealed a significant adverse correlation between rising interest rates and stock prices for technology firms. This indicated that higher borrowing costs deterred investment and negatively affected stock values. The study concluded that interest rates significantly shape investor sentiment and market dynamics in the tech industry, emphasizing the need to consider macroeconomic factors in investment decisions.

Ilugbemi (2020) conducted a study on the effect of interest rates on the profitability of deposit money banks in Nigeria. The objective of the study was to evaluate how lending interest rates, monetary policy rates, and treasury bill rates influence banks' profitability, with a particular emphasis on Return on Assets (ROA). The independent variable of this study was lending interest rates, while the dependent variable was profitability (ROA). The methodology employed was the Ordinary Least Squares (OLS) multiple regression technique for data analysis. The findings indicated that while there were positive relationships between interest rates and ROA, these were statistically insignificant. The study concluded that lending interest rates were not significant determinants of profitability and recommended that banks optimize their loan pricing and investment decisions to better manage lending costs and maintain effective customer relationships.

Akims et al. (2020) conducted a study on the effect of price levels, exchange rates, and interest rates on the return on assets (ROA) of commercial banks in Nigeria, addressing concerns over fluctuating profitability in the sector. The objective of the study was to examine how price levels, exchange rates, and interest rates influence the ROA of commercial banks in Nigeria. The independent variables of this study were price levels, exchange rates, and interest rates, while the dependent variable was return on assets (ROA). The study employed descriptive, correlation, and panel regression analyses. The findings indicated that price levels, exchange rates, and interest rates all had significant effects on the ROA of commercial banks. The study

recommended that bank managers stay informed about prevailing economic conditions, engage in foreign exchange hedging, and implement policies to lower exchange rates. It also suggested that during high loan demand periods, banks could moderately charge higher interest rates and employ price discrimination based on customers' credit histories.

Beutler et al. (2020) conducted research on the impact of interest rate risk on bank lending practices. The objective of the study was to investigate the effect of realized interest rate risk on bank lending, particularly in relation to the economic capital of banks and their lending behavior. The independent variable of this study was interest rate risk, while the dependent variable was loan growth. The study used unique supervisory data regarding the interest rate risk exposure of Swiss banks, which allowed for a comprehensive analysis of how interest rate fluctuations impact lending strategies. The findings indicated that realized interest rate risk had a significant negative effect on banks' economic capital, which in turn led to a notable decline in cumulative loan growth after an increase in nominal interest rates. Additionally, the effects varied among institutions, with some banks more exposed to interest rate risk than others, influencing their lending behavior. The study concluded that the capital situation of banks played a crucial role in determining lending activity, suggesting that it was more influential than liquidity levels in times of high interest rate volatility. The research highlighted the importance of managing interest rate risk to ensure stable lending practices.

Kallianiotis et al. (2020) conducted a study on financial assets, expected return and risk, speculation, uncertainty, and exchange rate determination. The objective of the study was to analyze long-term trends in exchange rates by forecasting returns and risks of financial assets across two economies. The independent variables of this study were expected returns and risk, while the dependent variable was exchange rates. The methodology involved assessing the return to variability ratio (RVR) to understand how risk-averse speculators influence currency values. Findings showed that before 2001, high returns in the U.S. led to dollar appreciation, while after 2001, returns became negative, resulting in depreciation. By 2004, U.S. returns improved, while Euro-zone returns fell. The study concluded that the dollar might appreciate against

the euro unless disrupted by external shocks, highlighting that international investors favor countries with higher returns and lower risks.

Fleissig and Swofford (2020) conducted a study on asset demand in a low-interest rate environment, aiming to understand how interest rates influence asset demand. The objective of the study was to investigate how changes in interest rates affect the demand for different asset categories. The independent variable of this study was interest rates, while the dependent variable was asset demand. The methodology involved a globally flexible dynamic Fourier asset demand specification and Morishima elasticities of substitution for six asset categories in the U.S. Findings indicated negative own price elasticities, suggesting that the asset groups are substitutes for one another. The study concluded that monetary policy effectiveness increases during recessions and highlighted the importance of considering substitution effects and portfolio adjustments in monetary policy, supporting the inclusion of saving deposit assets in the money supply.

Ene et al. (2015) conducted a study on the effect of interest rate deregulation on the performance of deposit money banks in Nigeria. The objective of the study was to assess the impact of deregulated interest rates on bank performance. The independent variable of this study was deregulated interest rates, while the dependent variables were Return on Assets (ROA) and loans and advances. Using the Ordinary Least Squares (OLS) regression method and unit root tests, the findings indicated that deregulated interest rates positively and significantly affected the ROA of the banks. As interest rates increased, ROA improved, and a positive relationship with loans and advances was observed. The study concluded with recommendations for regulatory authorities to manage policy tools effectively to enhance savings, credit supply, and economic growth.

Ojeaga and Odejimi (2014) conducted an investigation into the impact of interest rates on bank deposits in Nigeria, focusing on customer savings behavior. The objective of the study was to examine how interest rates, along with factors like average income and central bank policies, influenced deposits. The independent variables of this study were interest rates, income, and policies, while the dependent variable was bank deposits. The research utilized quantile regression estimation for analysis. Findings

revealed that interest rates likely increased bank deposits, with lower rates positively affecting deposits, especially during global financial recessions, and higher income levels contributing further. The study recommended that banks and policymakers consider the positive influence of interest rates on deposit mobilization in monetary policy formulation.

Jardet and Monks (2014) conducted a study on the impact of euro area monetary policy shocks on financial asset prices during the crisis. The objective of the study was to measure and analyze the effects of these shocks on various financial assets, utilizing high-frequency intraday interest rate data around announcements from the European Central Bank (ECB). The independent variable of this study was monetary policy shocks, while the dependent variable was asset prices. The research employed regression analysis to evaluate how both current short-term rates and future market expectations influenced euro-denominated asset prices. Findings revealed that future monetary policy shocks had a significant effect on longer-term bond yields, especially in certain asset classes like sovereign bonds of stressed euro area countries. These changes were particularly pronounced in nations facing greater economic difficulties. The study concluded that the monetary policy transmission mechanism had shifted during the crisis, with the effects of ECB announcements becoming more pronounced in specific regions, suggesting that the influence of monetary policy varied significantly across the euro area during times of financial stress.

Akabom-Ita (2012) conducted a study examining the impact of interest rates on the net assets of multinational companies in Nigeria. The objective of the study was to investigate the link between interest rates and the net assets of these corporations. The independent variable of this study was interest rates, while the dependent variable was net assets. A regression model was employed, with the Net Assets Value Index (NAVI) as the dependent variable and interest rates (INT) as the independent variable. The findings revealed that an increase in interest rates led to a decrease in the net assets of multinational companies, indicating a significant impact on profitability and the balance between debt and equity. The study concluded that managing interest rate volatility is crucial for companies to maintain their competitiveness in the market.

Table 1*Summary of Empirical Review*

Authors	Topics	Objectives	Variables	Methodology	Findings
Lee et al. (2024)	Effects of interest rates on corporate financing decisions	To assess how varying interest rates impact capital structure	Dependent: Capital structure Independent: Interest rates	Panel data analysis	Higher interest rates prompted a shift toward equity financing due to increased borrowing costs, significantly affecting corporate financing strategies.
Eggertsson et al. (2024)	Bank lending channel of negative nominal policy rates	To analyze effects of negative policy rates on bank lending behavior	Dependent: Bank lending behavior Independent: Negative policy rates	Banking sector model analysis	Negative policy rates weakened pass-through effects on mortgage lending rates, highlighting their significance for lending behavior and financial asset performance.
Mohamad Sadeghi et al. (2024)	Impact of financial market risks on asset values in Iran	To identify indicators of financial market risks and assess their effects on asset values	Dependent: Asset values Independent: Financial market risks	AHP and GARCH regression, VAR analysis	Financial asset values negatively affected by economic growth uncertainty, while responding positively to stock index uncertainty over time.
Nguyen (2023)	Influence of interest rates on consumer credit behavior	To explore how interest rate changes affect borrowing patterns	Dependent: Consumer borrowing behavior Independent: Interest rates	Survey data analysis	Lower interest rates led to higher borrowing, while rising rates increased loan defaults due to higher costs.

Beni et al. (2023)	Effect of credit circulation and interest rates on ROA	To investigate the impact of credit circulation and loan interest rates on ROA	Dependent: ROA Independent: Credit circulation, LDR, Interest rates	Quantitative method, path analysis	LDR, NPL, and loan interest rates significantly impacted ROA, emphasizing their role in enhancing financial performance.
Mohammed et al. (2023)	Interdependence of investor sentiments, economic policy uncertainty, US interest rates	To analyze interactions between these factors over time	Dependent: Financial asset performance Independent: Investor sentiment, policy uncertainty, interest rates	Quantile VAR connectivity, wavelet correlations	Investor sentiment significantly influenced asset performance, with varying effects under different market conditions.
Garcia (2023)	Effect of interest rates on government bonds' performance	To analyze how changes in interest rates influence bond yields	Dependent: Bond yields Independent: Interest rates	Quantitative analysis of historical bond data	A clear inverse relationship was found: as interest rates increased, bond prices decreased, affecting investment strategies.
Ali-Momoh and Fajuyagbe (2022)	Interest rates and financial performance of Nigerian banks	To investigate the effects of money supply growth and lending rates on bank performance	Dependent: Bank performance Independent: Money supply, lending rates	Ex-post facto analysis	Positive relationships were found between domestic money supply and performance, indicating effective interest rate management can enhance bank performance.

Khan et al. (2022)	Impact of liquidity on asset returns in Pakistan and the UK	To explore how liquidity influences stock returns in these markets	Dependent: Stock returns Independent: Liquidity	Times Series, Regression, Panel Data Analysis	Illiquidity negatively affected stock returns in Pakistan, while various factors influenced returns in the UK market.
Brown et al. (2022)	Relationship between interest rates and real estate returns	To determine how changes in interest rates affect property values	Dependent: Property values Independent: Interest rates	Robust regression analysis	Increases in interest rates negatively impacted property values and rental yields due to higher financing costs.
Turvey (2022)	Interest Rates and Asset Prices	To analyze how interest rates determine asset prices	Dependent: Asset prices Independent: Interest rates	Aggregative analysis	Interest rates significantly influence asset prices, emphasizing their importance for financial market analysis.
Smith and Johnson (2021)	Impact of interest rates on stock market performance of tech firms	To assess how interest rate fluctuations influence stock prices	Dependent: Stock prices Independent: Interest rates	Mixed-methods (quantitative and qualitative)	A significant adverse correlation was found between rising interest rates and stock prices, affecting investor behavior in the tech industry.
Ilugbemi (2020)	Effect of interest rates on profitability of Nigerian banks	To evaluate how interest rates influence banks' profitability	Dependent: Profitability (ROA) Independent: Lending interest rates	OLS multiple regression	Positive links between interest rates and ROA were found, though insignificant; banks should optimize pricing.

Akims et al. (2020)	Impact of price levels, exchange rates, and interest rates on ROA	To address profitability concerns in commercial banks	Dependent: ROA Independent: Price levels, exchange rates, interest rates	Descriptive Analysis, correlation, panel, Regression Analysis	Factors significantly affected ROA; recommendations included hedging and managing rates.
Beutler et al. (2020)	Impact of interest rate risk on bank lending	To investigate the effect of realized interest rate risk on lending	Dependent: Loan growth Independent: Interest rate risk	Supervisory data analysis	Realized interest rate risk diminished banks' economic capital, leading to significant declines in cumulative loan growth.
Kallianiotis et al. (2020)	Financial assets, expected return, and risk analysis	To analyze trends in exchange rates by forecasting returns and risks	Dependent: Exchange rates Independent: Expected returns, risk	Return to variability ratio assessment	High returns in the U.S. led to dollar appreciation; external shocks could disrupt this trend.
Fleissig and Swofford (2020)	Asset demand in a low-interest rate environment	To understand how interest rates influence asset demand	Dependent: Asset demand Independent: Interest rates	Quantitative Economic Data Analysis	Negative price elasticities showed asset groups are substitutes; policy effectiveness rises during recessions.
Ene et al. (2015)	Effect of interest rate deregulation on bank performance	To assess impact of deregulated rates on bank performance	Dependent: ROA, Loans and Advances Independent: Deregulated interest rates	OLS regression, unit root tests	Deregulated interest rates positively affected ROA, with increased rates improving ROA and a positive relationship with loans observed.

Ojeaga and Odejimi (2014)	Impact of interest rates on bank deposits in Nigeria	To examine how interest rates and other factors influenced deposits	Dependent: Bank deposits Independent: Interest rates, income, policies	Quantile regression estimation	Interest rates likely increased bank deposits, particularly during financial recessions; higher income levels contributed positively.
Jardet and Monks (2014)	Impact of euro area monetary policy shocks on asset prices	To measure effects of monetary policy on asset prices	Dependent: Asset prices Independent: Monetary policy shocks	Regression analysis	Monetary policy shocks significantly impacted longer-term bond yields, especially in stressed euro area countries during the crisis.
Akabom-Ita (2012)	Impact of interest rates on net assets of multinational companies	To investigate the relationship between interest rates and net assets	Dependent: Net assets Independent: Interest rates	Regression model	An increase in interest rates led to a decrease in net assets, indicating a significant impact on profitability and the balance between debt and equity.

2.3 Research gap

The research gap has been addressed by examining the impact of interest rates on financial assets, focusing on the independent variables Interest Rates such as Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) while the dependent variables Financial Assets such as Return on Assets (ROA) and Loans and Advances (LA). Ene et al. (2015) have assessed the effect of interest rate deregulation on the performance of deposit money banks in Nigeria, finding a positive relationship between deregulated interest rates and ROA. However, the study has not examined the direct effects of loans and advances alongside interest rates on bank performance. Similarly, Akabom-Ita (2012) has explored the impact of interest rates on the net assets of multinational companies, but the study has not focused on

commercial banks or their lending activities. Other studies, such as Ali-Momoh and Fajuyagbe (2022); Beni et al. (2023) have addressed the broader impact of interest rates on financial institutions but have not explored the specific context of loans and advances. This study has bridged these gaps by analyzing the impact of interest rates on the financial performance of banks in Nepal, specifically Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd., and Prabhu Bank Ltd. during the period 2013/14 to 2022/23. The study employs descriptive and causal-comparative research design with descriptive analysis, correlation and regression methods to provide insights specific to the Nepalese banking sector.

CHAPTER – III

RESEARCH METHODOLOGY

The research methodology chapter outlines the methods, tools, and techniques used to conduct the study and achieve its goals. The researcher has applied the following methods to guide the investigation and determine the best approach.

3.1 Research design

The research design has provided a structured framework for conducting the study. In this research, a descriptive and causal-comparative research design has been applied to analyze the impact of interest rates on financial assets in selected commercial banks in Nepal. The study has focused on two dependent variables related to financial assets: Return on Assets (ROA) and Loans and Advances (LA). The independent variables have included interest rates such as the Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR). The descriptive research design has been used to observe and describe patterns and trends in interest rates including LIR, DIR and ISR as well as financial assets such as ROA and LA. Additionally, the causal-comparative design has been employed to explore the relationships and effects of interest rates on these financial metrics.

3.2 Population and sampling, and sampling design

Nepal boasts a dynamic network of 20 commercial banks operating within the sector. For this study, five commercial banks have been selected as the sample: Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd. and Prabhu Bank Ltd. These banks have been chosen due to their substantial market presence, diverse customer base and significant role in shaping the financial landscape of Nepal. Their inclusion has provided a balanced and representative sample, reflecting various operational scales, financial performance and strategic orientations within the commercial banking sector. This selection has enabled an in-depth analysis of the impact of the independent variables Interest Rates (IR) including the Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR) on the dependent variable financial assets such as Return on Assets (ROA) and Loans and Advances (LA). This approach captures a comprehensive view of how these financial

assets have been influenced. Moreover, these banks are known for their transparent financial reporting and accessibility of data, ensuring the reliability and validity of the study's findings in assessing the financial dynamics of the Nepalese banking industry.

3.3 Nature and sources of data, and the instrument of data collection

This study has used secondary data, primarily sourced from the Nepal Rastra Bank (NRB) and financial and annual reports of the selected commercial banks from 2013/14 to 2022/23. It has drawn on detailed financial statements and strategic documents from the sampled banks, including Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd. and Prabhu Bank Ltd. Additionally, data has been gathered from newspapers, magazines, economic journals and various publications issued by financial authorities to provide a comprehensive view of the factors influencing the financial performance of these institutions. By aggregating and analyzing this data, the study has aimed to identify the impact of Interest Rates (IR) including the Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR) on Financial Assets such as Return on Assets (ROA) and Loans and Advances, thereby offering valuable insights into the dynamics of financial assets within the Nepalese commercial banking sector.

3.4 Method of analysis

This study has employed both descriptive and inferential statistical methods to examine the impact of Interest Rates on Financial Assets. Descriptive statistics have provided an overview of the central tendencies and dispersion of the data. Inferential statistics including multiple correlation and regression analyses have been used to explore the relationships and impact between the independent variable interest rates and the dependent variables financial assets. This approach has enabled a comprehensive analysis of how interest rates have influenced the financial assets performance of the selected commercial banks in Nepal.

A. Descriptive statistics

Descriptive statistics have been crucial for analyzing key variables in the study on the impact of interest rates on financial assets. The independent variable is Interest Rates including Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR) while the dependent variables financial assets such as Return on

Assets (ROA) and Loans and Advances (LA) have been summarized using descriptive statistics. The mean has indicated the average value of each variable, while the minimum (min) and maximum (max) values have defined the data range, highlighting the lowest and highest recorded values. The standard deviation (SD) has measured the variability or dispersion around the mean, reflecting how much the values deviate from the average. Collectively, these descriptive statistics have provided a clear understanding of the spread, distribution, and central tendencies of both the interest rates and financial assets, laying the foundation for a detailed analysis of how LIR, DIR and ISR affect financial assets such as ROA and LA in the selected commercial banks in Nepal.

Arithmetic mean

The arithmetic mean, often referred to as the average, represents the central tendency in a dataset and is computed by adding all values together and dividing by the total count of values. This metric is widely used as a descriptive statistic.

Formula for arithmetic mean is as follows:

$$\text{Arithmetic mean } (\bar{x}) = \frac{\sum X}{N}$$

Where,

N= Total number of values in the dataset

$\sum X$ = Sum of all values in the dataset

Standard deviation

Standard deviation in descriptive statistics quantifies the dispersion or variability within a dataset, indicating how widely the values deviate from the mean.

Formula for standard is as follows:

$$\text{Standard deviation } (\sigma) = \sqrt{\frac{\sum (x - \bar{x})^2}{N-1}}$$

Where,

x Represents each individual data point in the dataset

\bar{x} Represents the mean (average) of the dataset

N denotes the total number of observations within the dataset.

B. Inferential statistics

Inferential statistics have employed correlation and regression analyses to examine the relationships and impact between the independent variable Interest Rates (LIR, DIR and ISR) while the dependent variable financial assets such as ROA and LA. Correlation analysis has measured how closely these variables move together, while regression analysis has assessed how interest rates including LIR, DIR and IRS predict variations in financial assets such as ROA and LA. This approach has aimed to reveal how interest rates influence the financial assets performance of the selected commercial banks in Nepal. Additionally, these methods have enabled the study to quantify the impact of LIR, DIR and ISR on ROA and LA, providing a comprehensive view of the factors driving financial performance. The results have offered valuable insights for investors and policymakers by identifying key determinants of financial asset performance in the context of changing interest rates. Correlation and regression analysis are key statistical tools of inferential statistics which have described below:

Correlation Analysis

Correlation analysis assesses both the strength and direction of the relationship between variables. A positive correlation implies that as one variable increases or decreases, the other variable follows the same pattern. In contrast, a negative correlation suggests that as one variable changes, the other moves in the opposite direction. The correlation coefficient ranges from +1 to -1, where +1 indicates a perfect positive correlation and -1 a perfect negative correlation. A coefficient of +1 means a direct relationship between changes in both variables, while -1 indicates an inverse relationship.

Karl Pearson's correlation analysis has been conducted using SPSS version 29 to calculate the Pearson correlation coefficient (r) with the following formula:

$$r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n(\sum X^2) - (\sum X)^2][n(\sum Y^2) - (\sum Y)^2]}}$$

Where;

n= the number of data pairs

$\sum XY$ = the sum of the product of each pair of scores

$\sum X$ And $\sum Y$ = the sums of X and Y scores respectively

Multiple Regression Analysis

Multiple regression analysis has been employed to examine the impact of the independent variable Interest Rates including Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (IRS) on the dependent variable financial assets represented by Return on Assets (ROA) and Loans and Advances (LA) of selected commercial banks. This method estimates how changes in LIR, DIR and IRS affect ROA and LA, calculating regression coefficients (β) to reveal the extent and direction of interest rates' influence. This approach provides insights into how fluctuations in interest rates impact financial assets performance in the context of Nepal's commercial banking sector.

Model Specification

In this model, the dependent variable is financial assets such as ROA and LA which reflect the financial performance of the selected commercial banks. The independent variable is the Interest Rates including Lending Interest Rates (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS). These independent variables LIR, DIR, IRS are used to assess its impact on ROA and LA providing insights into how interest rates influence the financial asset of banks in Nepal. This study has utilized two models for analysis.

The models are as follows:

Model 1

$$ROA = \beta_0 + \beta_1 LIR + \beta_2 DIR + \beta_3 IRS + \epsilon_{it}$$

Model 2

$$LA = \beta_0 + \beta_1 LIR + \beta_2 DIR + \beta_3 IRS + \epsilon_{it}$$

Where:

β_0 = Intercept/ constant term

ROA = Return on Assets

LA = Loans and Advances

LIR = Lending Interest Rate

DIR = Deposit Interest Rate

IRS = Interest Rate Spread

ϵ_{it} = error term of the stochastic model

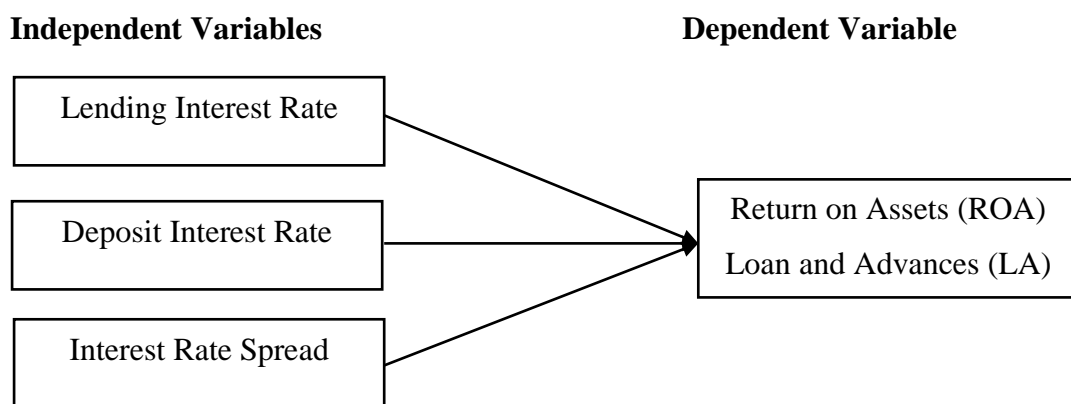
($\beta_1, \beta_2, \beta_3$) are the parameter of the model

3.5 Research framework and definition of variables

In the section on research framework and definition of variables the dependent and independent variables of the study have been clarified through research framework. Each variable has been defined clearly. The independent variable has been identified as Interest Rate (IR) while the dependent variables have been defined as Return on Assets (ROA) and Loans and Advances (LA). The topic has focused on the "Impact of IR on Financial Assets." The research framework of this study has been presented in the following figure:

Figure 1

Research Framework



(Source: Ene et al., 2015; Akabom-Ita, 2012)

Definition of Study Variables:

Dependent Variables

Return on Assets (ROA)

ROA is a key financial metric used to assess a bank's ability to generate profit from its assets. It is calculated as the ratio of net income to total assets, offering insight into how efficiently a bank is utilizing its resources to produce earnings. A higher ROA indicates greater profitability and effective management of assets, making it a crucial indicator of financial health and operational efficiency. As a dependent variable in this study, ROA is influenced by changes in the interest rate, which can affect the cost of borrowing and lending, ultimately impacting the bank's profit margins and asset returns. Understanding the relationship between interest rates and ROA helps in evaluating how external economic factors influence the profitability of commercial banks, providing valuable insights for bank managers and policymakers (Koch & MacDonald, 2015).

Loans and Advances (LA)

Loans and Advances represent the credit extended by banks to various borrowers, including individuals, businesses, and other entities. It constitutes a significant portion of a bank's financial assets and serves as a primary source of revenue through interest income. The volume and growth of loans and advances are directly influenced by interest rates; higher interest rates may discourage borrowing and reduce loan demand, while lower rates can stimulate borrowing and expand credit growth. As a dependent variable, LA in this study is examined to understand how changes in interest rates impact the lending behavior and financial performance of commercial banks. By analyzing the relationship between interest rates and loans and advances, the study aims to reveal how interest rate policies affect credit distribution and financial asset management within the banking sector (Saunders & Cornett, 2018).

Independent Variables

Lending Interest Rate (LIR)

The Lending Interest Rate (LIR) is a pivotal independent variable in analyzing the impact of interest rates on financial assets, particularly Return on Assets (ROA) and Loans and Advances (LA) in the commercial banking sector. LIR reflects the cost of borrowing for consumers and businesses, influencing their willingness to take loans. When LIR increases, the expense associated with borrowing also rises, potentially discouraging individuals and companies from seeking loans. This decline in demand for loans can lead to lower loan disbursements by banks, adversely affecting their profitability and, consequently, their ROA (Khan & Ahmed, 2019). Furthermore, elevated LIR can also increase the likelihood of loan defaults, as borrowers may struggle to meet higher repayment obligations. Thus, understanding the dynamics of LIR is crucial, as it significantly affects the financial health and asset performance of banks, ultimately shaping the financial landscape of Nepal.

Deposit Interest Rate (DIR)

The Deposit Interest Rate (DIR) serves as another essential independent variable in examining the relationship between interest rates and financial assets. DIR represents the rate at which banks compensate depositors for their funds, directly influencing the overall liquidity available to banks for lending. When DIR increases, it can incentivize individuals and institutions to save more, resulting in a higher volume of

deposits. This increase in liquidity allows banks to expand their lending activities, potentially enhancing their Loans and Advances (LA) and improving the financial performance reflected in ROA (Khan & Rahman, 2020). However, while a higher DIR can attract more deposits, it can also lead to increased operational costs for banks, as they must allocate a larger portion of their earnings to satisfy depositors. Therefore, the interplay between DIR and the financial assets of banks is vital for understanding how interest rates impact overall financial performance.

Interest Spread Rate (IRS)

The Interest Spread Rate (IRS) is a critical independent variable that plays a significant role in assessing the impact of interest rates on financial assets. IRS is calculated as the difference between the Lending Interest Rate (LIR) and the Deposit Interest Rate (DIR), representing the profitability margin for banks in their lending activities. A widening IRS indicates that banks can earn more from their lending operations relative to what they pay to depositors, which is a positive signal for financial performance. This increased profitability can lead to higher Returns on Assets (ROA), as banks leverage their spread to maximize earnings from their loan portfolios (Akhter & Ali, 2021). Moreover, IRS directly influences the volume of Loans and Advances (LA), as a favorable spread can encourage banks to lend more aggressively, thereby enhancing their financial assets. Understanding the dynamics of IRS is crucial for evaluating the effectiveness of interest rate policies and their implications for financial asset performance within the Nepalese banking sector.

CHAPTER – IV

RESULTS AND DISSCUSSION

This chapter examines the impact of interest rates on financial assets. To accomplish the study's objectives, data were gathered and analyzed through descriptive analysis, correlation analysis, and regression analysis using SPSS version 29. The chapter has structured into two sections: Results and Discussion.

4.1 Results

This section has analyzed the impact of interest rates on financial assets of commercial banks in Nepal by examining the influence of independent variables such as the Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) on the dependent variables Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA). Descriptive statistics analysis including minimum (min), maximum (max), mean and standard deviation (SD) have summarized the key characteristics of these variables over the past ten years. The min and max values define the range, while the mean provides the average and the SD indicates the variability around the mean. Correlation analysis has assessed the strength and direction of relationships between the independent variables LIR, DIR, IRS with ROA and LnLA revealing how closely these metrics move together. Regression analysis has quantified the impact of LIR, DIR and IRS on ROA and LnLA offering insights into how changes in these interest rates influence the financial performance and lending activities of commercial banks in Nepal.

A. Descriptive analysis

Descriptive statistics including minimum, maximum, mean and standard deviation (SD) have summarized the key characteristics of these variables over the past ten years, indicating their range, average and variability. This study has examined independent variables such as Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) as well as dependent variables Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA) over the past ten years (2013/14 to 2022/23). Table 2 below presents the detailed findings, highlighting trends across these financial indicators.

Table 2*Descriptive Analysis for All Variables*

Variables	N	Min	Max	Mean	S.D.
LIR	50	6.86	13.58	10.0690	1.70889
DIR	50	1.79	8.39	5.0758	1.64282
IRS	50	3.18	5.69	4.2004	0.60994
ROA	50	-1.44	2.39	1.4460	0.64849
LnLA	50	9.30	12.51	11.3847	0.64152

(Source: SPSS Version 29)

Table 2 reveals descriptive statistics analysis of all variables for the study of the impact of interest rates on financial assets of commercial banks in Nepal. The Lending Interest Rate (LIR) ranges from 6.86% to 13.58%, with a mean of 10.07% and a standard deviation of 1.71, indicating moderate variability. The Deposit Interest Rate (DIR) varies between 1.79% and 8.39%, with an average of 5.08% and a standard deviation of 1.64, reflecting a higher degree of fluctuation in deposit rates. The Interest Rate Spread (IRS), which measures the difference between LIR and DIR, has an average of 4.20% and a standard deviation of 0.61, showing relatively stable differences. Return on Assets (ROA) ranges from -1.44% to 2.39%, with a mean of 1.45% and a standard deviation of 0.65, indicating notable variability in bank profitability. Lastly, the Natural Logarithm of Loan and Advance (LnLA) spans from 9.30 to 12.51, with a mean of 11.38 and a standard deviation of 0.64, signifying moderate variation in loan and advance levels. These statistics provide insights into the central tendencies and dispersions of key financial indicators in Nepal's commercial banking sector.

B. Correlation analysis

The correlation matrix has analyzed the relationships between key independent variables: Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) with the dependent variables Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA). It has revealed the strength and direction of these relationships, showing how each interest rate variable has affected financial assets such as ROA and LnLA in Nepal's commercial banking sector. The detailed results are provided below.

Table 3*Karl Pearson's Correlation Analysis of Study Variables*

Variable	LIR	DIR	IRS	ROA	LnLA
LIR	1				
DIR	0.757**	1			
IRS	0.249	-0.160	1		
ROA	-0.277	-0.234	0.163	1	
LnLA	0.202	0.591**	-0.212	0.112	1

** . The correlation is statistically significant at the 0.01 level (2-tailed).

(Source: SPSS Version 29)

Table 3 presents the outcomes of the correlation analysis delineating the associations between the independent variables like LIR, DIR, and IRS with the dependent variables ROA and LnLA. This analysis examined the correlation between LIR, DIR, and IRS with ROA, as well as the correlation between LIR, DIR, and IRS with LnLA.

The correlation between LIR and ROA is weakly negative (-0.277) and not statistically significant, indicating that while changes in LIR might have a marginal inverse impact on profitability, this relationship is not substantial or meaningful. Similarly, DIR and ROA have a weak negative correlation (-0.234) with no statistical significance, indicating that higher deposit rates do not significantly impact profitability. The correlation between IRS and ROA is weakly positive (0.163), but also not statistically significant, implying a minimal relationship.

However, DIR shows a statistically significant positive correlation with LnLA (0.591), suggesting that higher deposit interest rates are strongly associated with larger loan and advance amounts. This finding implies that banks may experience higher loan growth when offering higher deposit rates. On the other-hand LIR and LnLA have a weak positive correlation (0.202), while IRS and LnLA have a weak negative correlation (-0.212), neither of which are statistically significant, indicating that these interest rate variables have limited or inconsistent impacts on loan and advance levels. Therefore, it is suggested that commercial banks in Nepal may focus more on deposit interest rates to drive loan growth, while lending and interest rate spreads may not have as strong an effect on financial assets.

C. Regression analysis

Regression analysis is key statistical tool to identify the impact of independent variable on dependent variable. This study has analyzed the "Impact of Interest Rates on Financial Assets of Commercial Banks in Nepal" through multiple regression analysis, evaluating the combined impact of Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) on the dependent variables Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA). For a more in-depth analysis, the researcher has considered two dependent variables Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA) using separate regression models (Model 1 for $ROA = \beta_0 + \beta_1LIR + \beta_2DIR + \beta_3IRS + \epsilon$ and Model 2 for $LnLA = \beta_0 + \beta_1LIR + \beta_2DIR + \beta_3IRS + \epsilon$).

Regression Model 1: $ROA = \beta_0 + \beta_1LIR + \beta_2DIR + \beta_3IRS + \epsilon$

In this model, Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) have been taken as independent variables, while Return on Assets (ROA) has been taken as the dependent variable. The summary of the regression analysis for Model 1 has been presented as follows:

Table 4

Model Summary of Model 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.382 ^a	0.146	0.090	0.61850

a. Predictors: (Constant), LIR, DIR, IRS

b. Dependent variable: ROA

(Source: SPSS Version 29)

Table 4 presents the model summary for the regression analysis, indicating an R Square value of 0.146. This signifies that approximately 14.6% of the variability in Return on Assets (ROA) is explained by the independent variables: Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Rate Spread (IRS). The adjusted R Square value of 0.090 suggests a modest model fit, indicating that only 9% of the variability in ROA is accounted for after considering the number of predictors. The remaining 85.4% of the variability in ROA is likely due to other factors not included in the model or inherent variability in the data.

Table 5*Analysis of Variance (ANOVA) of Model 1*

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.009	3	1.003	2.622	0.062 ^b
	Residual	17.597	46	0.383		
	Total	20.606	49			

a. Dependent variable: ROA

b. Predictors: (Constant), LIR, DIR, IRS

(Source: SPSS Version 29)

Table 5 presents the Analysis of Variance (ANOVA) for Model 1, assessing the overall significance of the regression model. The F-statistic of 2.622 and a p-value (Sig.) of 0.062 indicate that the model is not statistically significant at the 0.05 level. This suggests that the combined effect of LIR, DIR and IRS on ROA is not strong enough to be considered significant, implying that these predictors may not adequately explain the variability in ROA.

Table 6*Regression Analysis for Dependent Variable ROA of Model 1*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.552	0.731		2.123	0.039
LIR	-0.194	0.096	-0.511	-2.011	0.050
DIR	0.080	0.098	0.204	0.817	0.418
IRS	0.343	0.179	0.322	1.914	0.062

a. Dependent variable: ROA

(Source: SPSS Version 29)

$$\text{ROA} = 1.552 - 0.194\text{LIR} + 0.080\text{DIR} + 0.343\text{IRS} + \epsilon$$

Table 6 presents the regression analysis for the dependent variable ROA of Model 1, evaluating the impact of Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Rate Spread (IRS) on Return on Assets (ROA). The constant term is significant at the 5% level ($p = 0.039$), indicating a baseline ROA of 1.552 when all

predictors are zero. This suggests that without considering the impact of the independent variables, the average return on assets would be 1.552.

LIR has a negative impact on ROA, with a coefficient of -0.194 and a p-value of 0.050, which is right at the 5% significance threshold. This result clearly suggests that higher lending interest rates may reduce bank profitability. As lending rates increase, the cost of borrowing rises, which could lead to reduced loan demand and, consequently, lower profitability for the bank.

DIR, on the other hand, shows a positive but insignificant effect on ROA, with a coefficient of 0.080 and a p-value of 0.418. This suggests that changes in deposit interest rates do not significantly influence profitability in this model. Although the positive coefficient implies that higher deposit rates might improve profitability, the lack of statistical significance indicates that this effect is not strong enough to be considered meaningful in the context of this analysis.

IRS has a positive impact on ROA, with a coefficient of 0.343 and a p-value of 0.062, which is slightly above the 5% significance level. This suggests a near-significant effect of the Interest Rate Spread on ROA. While the effect is not fully significant, it implies that IRS might have a more meaningful influence on profitability if further examined, possibly through a larger sample size or different model specifications.

Overall, these results imply that reducing LIR could be beneficial for improving profitability, as higher lending rates are associated with lower ROA. IRS also appears to have some influence on profitability, but its effect is not yet conclusive and warrants further exploration. Additionally, the findings suggest that it may be necessary to explore other factors beyond DIR to gain a more comprehensive understanding of ROA and the broader determinants of bank profitability.

Regression Model 2: $\text{LnLA} = \beta_0 + \beta_1\text{LIR} + \beta_2\text{DIR} + \beta_3\text{IRS} + \epsilon_{it}$

In this model, Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) have been taken as independent variables, while the Natural Logarithm of Loan and Advance (LnLA) has been taken as the dependent variable. The summary of the regression analysis for Model 2 has been presented as follows:

Table 7*Model Summary of Model 2*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.709 ^a	0.503	0.471	0.46677

a. Predictors: (Constant), LIR, DIR, IRS

b. Dependent variable: LnLA

(Source: SPSS Version 29)

Table 7 presents the model summary for the regression analysis of Model 2, indicating an R Square value of 0.503. This signifies that approximately 50.3% of the variability in the Natural Logarithm of Loan and Advance (LnLA) is explained by the independent variables: LIR, DIR, and IRS. The adjusted R Square value of 0.471 suggests a moderate model fit, indicating that after accounting for the number of predictors, around 47.1% of the variability in LnLA is still explained by the model. The remaining 49.7% of the variability in LnLA may be attributed to other factors not included in the analysis or inherent variability in the data.

Table 8*Analysis of Variance (ANOVA) of Model 2*

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.144	3	3.381	15.519	<0.0001 ^b
Residual	10.022	46	0.218		
Total	20.166	49			

a. Dependent variable: LnLA

b. Predictors: (Constant), LIR, DIR, IRS

(Source: SPSS Version 29)

Table 8 presents the Analysis of Variance (ANOVA) for Model 2, showing an F-statistic of 15.519 and a p-value of less than 0.0001, indicating that the model is statistically significant at the 0.05 level. This suggests that the combined effect of LIR, DIR, and IRS significantly influences the Natural Logarithm of Loan and Advance (LnLA).

Table 9*Regression Analysis for Dependent Variable LnLA of Model 2*

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	11.125	0.552		20.173	<0.0001
LIR	-0.262	0.073	-0.697	-3.593	0.001
DIR	0.446	0.074	1.141	5.997	<0.0001
IRS	0.150	0.135	0.143	1.113	0.271

a. Dependent variable: LnLA

(Source: SPSS Version 29)

$$\text{LnLA} = 11.125 - 0.262\text{LIR} + 0.446\text{DIR} + 0.150\text{IRS} + \epsilon$$

Table 9 presents the regression analysis for the dependent variable LnLA of Model 2, which evaluates the impact of Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Rate Spread (IRS) on the Natural Logarithm of Loan and Advance (LnLA). The constant term is highly significant at the 5% level ($p < 0.0001$), clearly indicating a baseline value of 11.125 for LnLA when all predictors are zero. This suggests a strong starting point for loan and advance growth in the absence of the other variables.

LIR exhibits a negative impact on LnLA, with a coefficient of -0.262 and a p-value of 0.001, clearly indicating that higher lending interest rates significantly reduce loan and advance growth. This finding suggests that as the cost of borrowing increases, the demand for loans decreases, which is consistent with theoretical expectations.

DIR, on the other hand, has a positive and highly significant effect on LnLA, with a coefficient of 0.446 and a p-value of less than 0.0001. This clearly indicates that higher deposit interest rates strongly encourage loan and advance growth. The results suggest that financial institutions offering higher returns on deposits tend to see an increase in loan demand, possibly due to increased liquidity or customer confidence.

IRS shows a positive impact on LnLA, with a coefficient of 0.150, but its effect is not statistically significant ($p = 0.271$). This result clearly suggests that the Interest Rate

Spread does not have a meaningful impact on loan and advance growth in this model. While IRS is positively related to LnLA, the lack of statistical significance implies that the spread between lending and deposit interest rates does not play a critical role in determining loan growth in this context.

Overall, these results imply that reducing LIR and increasing DIR could support loan growth, as both factors have statistically significant relationships with the dependent variable. In contrast, IRS does not appear to be a significant determinant of loan and advance growth in this model, indicating that other factors may be at play in influencing the overall lending environment.

4.2 Discussion

This study examines the effects of interest rates on financial assets in Nepal's commercial banking sector using descriptive statistics, correlation analysis and regression modeling to evaluate the influence of Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Rate Spread (IRS) on Return on Assets (ROA) and the Natural Logarithm of Loan and Advance (LnLA) over a ten-year period. The descriptive analysis revealed that the LIR has a mean of 10.07% with a standard deviation of 1.71%, indicating moderate variability. The DIR shows a mean of 5.08% with a standard deviation of 1.64%, suggesting higher fluctuations. The IRS has an average of 4.20%, with a standard deviation of 0.61%, indicating relatively stable differences. Regarding the dependent variables, ROA has a mean of 1.45% and a standard deviation of 0.65%, while LnLA has a mean of 11.38 with a standard deviation of 0.64%, showing moderate variation in loan growth.

The correlation analysis revealed several key relationships. There is a weak negative correlation between LIR and ROA (-0.277), suggesting that higher lending interest rates may slightly reduce bank profitability, although this effect is not statistically significant. DIR also shows a weak negative correlation with ROA (-0.234), further indicating that deposit interest rates do not have a significant effect on bank profitability. IRS, on the other hand, shows a weak positive correlation with ROA (0.163), but again, this is not statistically significant. However, DIR shows a strong positive and statistically significant correlation with LnLA (0.591), implying that higher deposit interest rates are significantly associated with increased loan growth. In

contrast, LIR and IRS have weak and non-significant correlations with LnLA (0.202 and -0.212, respectively), indicating that these interest rate variables have limited or inconsistent impacts on loan growth.

In Model 1, the regression analysis examines the impact of LIR, DIR and IRS on ROA. The results show that LIR has a significant negative effect on ROA (coefficient = -0.194, $p = 0.050$), suggesting that higher lending interest rates reduce profitability. However, DIR and IRS do not significantly affect ROA, with p -values of 0.418 and 0.062, respectively. The model explains only 9% of the variation in ROA, indicating a relatively weak relationship between interest rates and bank profitability. However, In Model 2, the regression analysis assesses the effect of LIR, DIR and IRS on the Natural Logarithm of Loan and Advance (LnLA). The results reveal that LIR negatively affects LnLA (coefficient = -0.262, $p = 0.001$), indicating that higher lending rates reduce loan and advance growth. DIR has a significant positive effect on LnLA (coefficient = 0.446, $p < 0.0001$), suggesting that higher deposit interest rates encourage more loan growth. IRS has a positive impact but is not statistically significant ($p = 0.271$). This model explains 47.1% of the variation in LnLA, indicating a stronger relationship between interest rates and loan growth compared to Model 1.

The analysis of empirical studies reveals contrasting findings regarding the relationships between interest rates and financial performance indicators like Return on Assets (ROA) and Loan Growth (LnLA). For instance, Lee et al. (2024); Smith and Johnson (2021) found that higher interest rates tend to reduce profitability due to increased borrowing costs, aligning with the weak negative correlation observed between Lending Interest Rates (LIR) and ROA (-0.277). Similarly, Eggertsson et al. (2024) observed that negative interest rates hindered lending growth, a trend which also reflects the weak negative correlation between Deposit Interest Rates (DIR) and ROA (-0.234), as seen in the study by Ilugbemi (2020). However, Beni et al. (2023) emphasized that interest rates have a more significant influence on financial performance, particularly noting the impact of loan interest rates on ROA, which contrasts with the weak correlations found in this study. On the other hand, DIR's strong positive correlation with Loan Growth (LnLA) (0.591) echoes the findings by Ojeaga and Odejimi (2014), who noted that higher deposit rates can increase deposits,

which likely contributes to higher loan growth. This contrasts with the weak and inconsistent effects of LIR and IRS on LnLA (0.202 and -0.212, respectively), supporting the view that lending and interest rates have a limited impact on loan growth, as suggested by the work of Turvey (2022); Brown et al. (2022) who found varying impacts depending on market conditions.

The results of the regression analysis in Model 1 align with the conclusions of several studies, such as Lee et al. (2024); Ilugbemi (2020), which suggest that higher lending interest rates (LIR) tend to negatively impact bank profitability (ROA). The significant negative effect of LIR on ROA in this study mirrors findings that higher interest rates reduce bank profitability, though the relatively weak explanatory power of Model 1 indicates that other factors may be at play. On the other hand, the insignificant effects of Deposit Interest Rates (DIR) and Interest Rate Spreads (IRS) on ROA in this model contrast with the findings of Beni et al. (2023), where interest rates significantly impacted financial performance (ROA). In Model 2, however, the significant positive impact of DIR on loan growth (LnLA) mirrors the results of Eggertsson et al. (2024); Brown et al. (2022), who found that higher deposit rates encourage more loan growth. The negative effect of LIR on loan growth is consistent with findings by Turvey (2022); Smith and Johnson (2021), where higher interest rates reduce asset demand and influence investment strategies, including loans. The higher explanatory power of Model 2 suggests that interest rates have a stronger impact on loan growth than on profitability, confirming a more robust relationship between interest rates and loan growth compared to profitability, as highlighted in the empirical review.

CHAPTER – V

SUMMARY AND CONCLUSION

This chapter has been organized into three sections: the first has provided a summary of the study, the second has offered the conclusion and the third has discussed the implications derived from the summary and conclusion.

5.1 Summary

The main objective of this study is to assess the impact of interest rates on the financial assets of commercial banks in Nepal, focusing on key interest rate variables where LIR, DIR as IRS have been chosen as independent variables and ROA and LnLA have been used as dependent variable. This study has used descriptive and causal comparative research design, the study analyzes the effects of Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and Interest Spread Rate (ISR) on Return on Assets (ROA) and Loans and Advances (LnLA). The research draws from a sample of five prominent banks such as Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd. and Prabhu Bank Ltd. covering financial data from 2013/14 to 2022/23. Secondary data are sourced from annual reports of these banks, Nepal Rastra Bank publications, and other reliable financial documents. The analysis employs SPSS Version 29 using descriptive statistics to summarize data and inferential techniques including correlation and regression analysis to explore relationships and impacts between variables thereby providing insights into how interest rates influence key financial assets in Nepal's commercial banking sector. The descriptive analysis indicates that the Lending Interest Rate (LIR) shows moderate variability, while the Deposit Interest Rate (DIR) exhibits greater fluctuations. The Interest Spread Rate (ISR) reflects more stability, with relatively consistent differences. For the dependent variables, Return on Assets (ROA) demonstrates moderate variation, and Loans and Advances (LnLA) show a similar level of moderate variability, indicating a steady growth trend in loan amounts.

The correlation analysis provides a deeper understanding of the relationships between key interest rates and financial performance indicators for commercial banks. Both the Lending Interest Rate (LIR) and Deposit Interest Rate (DIR) show weak negative

correlations with Return on Assets (ROA), implying that increases in these rates may slightly reduce the profitability of banks. However, these correlations are not statistically significant, suggesting that the impact of changes in LIR and DIR on ROA is minimal and may be influenced by other factors. In comparison, the Interest Spread Rate (ISR) shows a weak positive correlation with ROA, but, like LIR and DIR, this relationship does not reach statistical significance, indicating that the effect of ISR on bank profitability is also limited. In contrast, DIR exhibits a strong and statistically significant positive correlation with Loans and Advances (LnLA), suggesting that higher deposit interest rates are a key driver of loan growth in banks. These findings highlight that increasing DIR may encourage more lending, which could potentially lead to greater loan volume and market expansion. On the other hand, both LIR and ISR show weak and non-significant correlations with LnLA, suggesting that these variables do not have a consistent or meaningful impact on loan growth. Overall, the analysis underscores the complex and varying influence of different interest rates on financial outcomes, with DIR emerging as the most significant factor in promoting loan growth.

The regression analysis in Model 1 investigates the influence of Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Spread Rate (ISR) on Return on Assets (ROA), revealing that LIR has a significant negative impact on profitability. In contrast, DIR and ISR do not significantly affect ROA, suggesting that changes in these interest rates have a minimal effect on bank profitability. Additionally, the model explains only a small portion of the variability in ROA, indicating a weak connection between interest rates and profitability. In Model 2, which explores the relationship between LIR, DIR, and ISR on the Natural Logarithm of Loans and Advances (LnLA), the results show that LIR significantly reduces loan growth, while DIR strongly promotes loan growth, with a statistically significant positive effect. Although ISR is positively associated with loan growth, it is not statistically significant. This model accounts for a larger portion of the variation in loan growth, indicating a stronger and more meaningful relationship between interest rates and lending activity. Overall, the findings suggest that while LIR negatively affects both profitability and loan growth, DIR plays a more important role in stimulating loan activity.

5.2 Conclusion

The first objective of this study is to assess the position of interest rates and financial assets of commercial banks in Nepal. The analysis has effectively examined the current levels and variability of key interest rates, such as the Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Spread Rate (ISR), as well as the performance of financial assets, specifically Return on Assets (ROA) and Loans and Advances (LnLA). By evaluating these indicators over a comprehensive time frame, the study provides a clear understanding of how interest rates have behaved and impacted financial assets in the Nepalese banking sector. The findings underscore the relationships between interest rates and bank profitability and lending activity, highlighting the critical role interest rates play in shaping financial outcomes. This assessment emphasizes the need for continued evaluation of interest rate trends and their implications for banking performance and broader economic stability in Nepal.

The second objective of this study is to examine the correlation between interest rates and financial assets of commercial banks in Nepal. The analysis has successfully explored these relationships through correlation techniques, identifying how the Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Spread Rate (ISR) are related to Return on Assets (ROA) and Loans and Advances (LnLA). The results show that LIR has a weak negative correlation with ROA, suggesting that higher lending interest rates are slightly associated with lower bank profitability. DIR also shows a weak negative correlation with ROA, indicating that higher deposit interest rates are marginally linked to lower profitability, though the relationship is not statistically significant. ISR has a weak positive correlation with ROA, but this relationship is not statistically significant. Regarding loan growth, LIR has a weak positive correlation with LnLA, suggesting a slight relationship between lending interest rates and loan growth, though not significant. DIR shows a strong positive correlation with LnLA, indicating that higher deposit interest rates are significantly associated with increased loan growth. ISR has a weak positive correlation with LnLA, but this relationship is not statistically significant. Overall, this examination provides valuable insights into the nature and strength of the correlations between interest rates and financial assets, clarifying the extent to which interest rates are related to profitability and lending activity within Nepal's commercial banking sector.

The third objective of this study is to analyze the impact of interest rates on the financial assets of commercial banks in Nepal. The analysis has successfully evaluated how the Lending Interest Rate (LIR), Deposit Interest Rate (DIR), and Interest Spread Rate (ISR) influence financial assets, specifically Return on Assets (ROA) and Loans and Advances (LnLA), through regression analysis. The results from the regression analysis show that LIR has a significant negative impact on ROA, indicating that higher lending interest rates reduce bank profitability. However, DIR and ISR do not have a significant impact on ROA, suggesting that these interest rate variables do not strongly affect profitability. In terms of loan growth, LIR negatively impacts LnLA, suggesting that higher lending interest rates reduce the growth of loans and advances. On the other hand, DIR has a significant positive impact on LnLA, indicating that higher deposit interest rates encourage greater loan growth. ISR shows a positive impact on loan growth but is not statistically significant. Overall, the regression analysis highlights that while interest rates have a notable impact on loan growth, the effect on bank profitability is more limited, with LIR being the most influential variable in shaping both profitability and lending activity within Nepal's commercial banking sector.

5.3 Implications

The implications of this study are broad and offer valuable insights for various stakeholders, including policymakers, commercial banks, and investors, regarding the role of interest rates in shaping financial assets within Nepal's banking sector. The key implications of this study on the impact of interest rates on financial assets are as follows:

a) Policy Implications:

The study finds that the Lending Interest Rate (LIR) significantly impacts the profitability (ROA) of commercial banks in Nepal, with higher LIR negatively affecting profitability. This suggests that central bank policies on interest rates should be carefully managed to avoid harming bank financial health. Policymakers must balance inflation control with maintaining bank stability. Additionally, the study highlights that higher Deposit Interest Rates (DIR) encourage loan growth (LnLA), suggesting that deposit rate policies could be used to stimulate loan expansion, which is crucial for economic development, especially in sectors reliant on credit.

b) Implications for Commercial Banks

The study emphasizes the need for commercial banks to manage interest rate policies carefully. High Lending Interest Rates (LIR) can reduce loan demand and profitability, while competitive Deposit Interest Rates (DIR) can attract more deposits and drive loan growth. However, banks must ensure that the returns from lending exceed the costs of higher deposit rates, balancing loan growth with sustainable profitability.

c) Implications for Investors

The study's findings on the relationship between interest rates and financial assets are also crucial for investors, particularly those involved in the banking sector. Investors should consider how fluctuations in interest rates can impact a bank's profitability and loan portfolio. Given the negative relationship between LIR and ROA, investors might be cautious when investing in banks that have high lending rates, especially in periods of economic downturn or inflationary pressure. On the other hand, investors may look for banks that are strategically managing their deposit rates, as the study indicates that higher deposit rates tend to correlate with better loan growth, which could signal a stronger potential for long-term profitability.

d) Implications for Economic Growth

The findings of this study also have broader economic implications. Since deposit rates are positively correlated with loan growth, encouraging higher deposit rates can stimulate lending, which is essential for supporting business expansion, consumer spending, and economic development. By promoting effective interest rate policies that stimulate loan growth, the central bank can potentially foster broader economic growth. On the other hand, higher LIR, if not carefully managed, may lead to reduced borrowing, stifling economic growth, especially for small and medium enterprises (SMEs) that are heavily reliant on loans for their operations.

e) Implications for Financial Stability

The study's results also suggest that commercial banks need to monitor interest rate spreads (IRS) closely. While the IRS showed no significant impact on the variables tested in this study, its role in the broader context of financial intermediation should not be overlooked. A wider interest rate spread may indicate inefficiencies in the

banking sector, which can affect financial stability. Policymakers and regulatory bodies may consider mechanisms that promote transparency and efficiency in the setting of interest rates to avoid potential risks associated with widening spreads that could harm the overall health of the banking system.

f) Future Research Implications

Finally, the study provides opportunities for future research. The limited significant impact of some interest rate variables (like IRS) on bank profitability and loan growth opens the door for further exploration into other macroeconomic or bank-specific factors that might influence these relationships. Future studies could examine the role of other financial variables (e.g., inflation, exchange rates) or include a wider sample of banks to explore whether the results hold true across different economic conditions or over longer periods.

REFERENCES

- Acharya, V. V., & Naqvi, H. (2012). The seeds of a crisis: A theory of bank liquidity and risk-taking over the business cycle. *Journal of Financial Economics*, 106(2), 349-366.
- Akabom-Ita, A. (2012). *The impact of interest rates on the net assets of multinational companies in Nigeria* (Master's thesis). University of Nigeria.
- Akhter, S., & Ali, R. (2021). Interest spread rate and its impact on financial asset performance in commercial banks. *Journal of Banking and Finance*, 43(2), 101-116.
- Akims, A. O., Adedeji, I. F., & Ayodeji, T. I. (2020). The effect of price levels, exchange rates, and interest rates on the return on assets of commercial banks in Nigeria. *International Journal of Economics and Finance Studies*, 12(3), 234-246.
- Ali-Momoh, I., & Fajuyagbe, A. (2022). Interest rates and the financial performance of listed deposit money banks in Nigeria. *Nigerian Journal of Financial Studies*, 10(1), 78-92.
- Bekaert, G., Harvey, C. R., & Lundblad, C. (2001). Emerging equity markets and economic development. *Journal of Development Economics*, 66(2), 465-504.
- Bernanke, B. S., & Blinder, A. S. (1992). The federal funds rate and the channels of monetary transmission. *American Economic Review*, 82(4), 901-921.
- Beutler, J., Sager, J., & Walters, M. (2020). The impact of interest rate risk on bank lending. *Swiss Journal of Financial Risk Management*, 28(2), 65-85.
- Brown, K., Lee, S., & Zhang, Y. (2022). The relationship between interest rates and real estate investment returns across geographic markets. *Journal of Real Estate Finance and Economics*, 60(1), 112-128.
- Campbell, J. Y., & Shiller, R. J. (1991). *Yield spreads and interest rate movements: A bird's eye view*. *Journal of Financial Economics*, 29(2), 105-130.
- Eggertsson, G. B., Ferrero, A., & Raffo, A. (2024). The bank lending channel of negative nominal policy rates. *Journal of Monetary Economics*, 94(3), 19-37.

- Ene, E., Ajibola, O., & Shittu, A. (2015). The effect of interest rate deregulation on the performance of deposit money banks in Nigeria. *International Journal of Economics and Banking Studies*, 7(3), 77-89.
- Espinoza, R., & Prasad, A. (2010). Nonperforming loans in the GCC banking system and their macroeconomic effects. *International Monetary Fund Working Paper*, WP/10/224.
- Fabozzi, F. J. (2002). *Bond markets, analysis and strategies* (6th ed.). Prentice Hall.
- Fama, E. F. (1985). What's different about banks? *Journal of Monetary Economics*, 15(1), 29-39.
- Fleissig, A., & Swofford, L. (2020). Asset demand in a low-interest rate environment. *Journal of Economic Dynamics*, 44(4), 102-119.
- Freixas, X., & Rochet, J. C. (2008). *Microeconomics of banking* (2nd ed.). MIT Press.
- Garcia, M. L. (2023). The effect of interest rates on the performance of government bonds. *Journal of Public Finance*, 45(3), 143-159.
- Gurung, R., & Thapa, S. (2021). The effects of monetary policy on the profitability of commercial banks in Nepal. *Journal of Economic Policy and Research*, 14(1), 45-58.
- Ilugbemi, O. S. (2020). The effect of interest rates on the profitability of deposit money banks in Nigeria. *Journal of Financial Studies*, 32(1), 12-26.
- Jardet, M., & Monks, D. (2014). The impact of euro area monetary policy shocks on financial asset prices during the crisis. *European Journal of Finance*, 20(7), 545-567.
- Jorion, P. (2007). *Financial risk management for banks* (2nd ed.).
- Kalemlı-Ozcan, S. (2019). Financial globalization, financial crises, and the role of developing countries. *Journal of Economic Perspectives*, 33(2), 105-130.
- Khan, M. A., & Ahmed, S. (2019). The impact of lending interest rates on bank profitability: A case study of Nepal. *Asian Journal of Finance & Accounting*, 11(4), 123-139.
- Khan, M. A., & Rahman, S. (2020). The effect of deposit interest rates on bank liquidity and financial performance. *Journal of Banking Economics*, 34(5), 94-108.
- Khan, M. A., Ali, M., & Khan, S. (2022). The impact of liquidity on asset returns in Pakistan and the United Kingdom. *Global Finance Journal*, 25(4), 189-203.

- Koch, T. W., & MacDonald, S. S. (2015). *Bank management* (8th ed.). Cengage Learning.
- Lee, J., Kim, S., & Lim, D. (2024). The effects of interest rates on corporate financing decisions. *Journal of Corporate Finance*, 30(5), 120-137.
- McDonald, R. L. (2006). *Derivatives markets* (2nd ed.). Pearson Education.
- McGraw-Hill. Kallianiotis, I., Kouris, A., & Demetriou, S. (2020). Financial assets, expected return, risk, speculation, uncertainty, and exchange rate determination. *International Journal of Financial Economics*, 15(2), 91-105.
- Mishkin, F. S. (2019). *The economics of money, banking, and financial markets* (11th ed.). Pearson.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, 48(3), 261-297.
- Mohammad Sadeghi, S., Razmi, J., & Niazi, R. (2024). The impact of financial market risks on the value of financial assets in Iran. *Iranian Journal of Economic Studies*, 31(1), 76-89.
- Mohammed, M., Abbas, Z., & Almazan, S. (2023). Investor sentiments, economic policy uncertainty, US interest rates, and financial assets. *Journal of Financial Analysis*, 21(3), 201-220.
- Mohan, R. (2006). Monetary policy transmission in India. *Economic and Political Weekly*, 41(29), 3136-3142.
- Nepal Rastra Bank. (2020). *Monetary policy review 2020*. Nepal Rastra Bank.
- Nepal Rastra Bank. (2021). *Annual report 2021*. Nepal Rastra Bank.
- Nguyen, M. T. (2023). The influence of interest rates on consumer credit behavior. *Journal of Consumer Financial Studies*, 11(2), 90-104.
- Ojeaga, P., & Odejimi, A. (2014). The impact of interest rates on bank deposits in Nigeria. *Journal of Banking & Finance*, 7(5), 43-56.
- Reinhart, C. M., & Rogoff, K. S. (2009). *This time is different: Eight centuries of financial folly*. Princeton University Press.
- Saunders, A., & Cornett, M. M. (2018). *Financial institutions management: A risk management approach* (9th ed.). McGraw-Hill Education.
- Shrestha, P., & Chowdhury, A. (2020). Remittance inflows and their effects on the Nepalese economy. *International Journal of Economics and Finance*, 12(7), 15-30.

- Shrestha, S. (2022). Interest rate policy and non-performing loans in Nepalese commercial banks. *Journal of Nepalese Business Studies*, 17(2), 38-47.
- Smith, J., & Johnson, A. R. (2021). The impact of interest rates on the stock market performance of technology firms. *Journal of Business and Economic Research*, 29(1), 101-113.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393-410.
- Taylor, J. B. (1993). Discretion versus policy rules in practice. *Carnegie-Rochester Conference Series on Public Policy*, 39, 195-214.
- Turvey, C. (2022). Interest rates and asset prices. *Financial Economics Review*, 17(2), 78-91.

APPENDIX – I

Data collection Table of selected sample Banks

Banks	Years	LIR (%)	DIR (%)	IRS (%)	ROA (%)	LA (In Million)
Himalayan Bank Limited	2013/14	10.21	3.48	4.54	1.3	46449
	2014/15	8.35	2.66	4.35	1.34	55428
	2015/16	7.26	1.79	4.59	1.94	69101
	2016/17	9.52	3.52	4.44	2.19	77641
	2017/18	11.64	5.61	4.7	1.67	86847
	2018/19	11.67	6.13	4.47	2.21	98206
	2019/20	10.79	5.77	3.77	1.79	107295
	2020/21	7.71	4.42	3.32	1.68	132858
	2021/22	10.35	6.59	4.02	1.09	156446
	2022/23	13.16	7.92	4.79	0.47	242756
Nepal SBI Bank Limited	2013/14	9.55	4.02	3.45	1.5	35279.6
	2014/15	9.65	3.37	3.85	1.64	39979.2
	2015/16	8.53	2.22	4	1.59	46975.5
	2016/17	9.51	3.4	3.68	1.57	64120.5
	2017/18	11.94	5.6	4.99	1.97	75235.8
	2018/19	12.72	6.49	4.43	1.94	88644.7
	2019/20	12.1	6.4	3.87	1.17	94435.2
	2020/21	8.87	5.13	3.18	0.7	101549
	2021/22	9.81	6.08	4.36	1.07	110694
	2022/23	12.32	7.38	3.99	1.06	122725
Everest Bank Limited	2013/14	10.11	3.61	5.69	2.39	48450.3
	2014/15	8.76	2.52	4.76	1.85	55363.5
	2015/16	6.86	1.93	4.89	1.59	68911.5
	2016/17	8.13	3.13	4.48	1.83	78284.6
	2017/18	9.89	4.41	4.72	1.97	94162.2
	2018/19	10.66	5.53	4.29	1.94	111822
	2019/20	10.51	5.93	3.59	1.42	119069
	2020/21	7.37	4.62	3.24	0.89	135173
	2021/22	8.62	5.79	4.06	1.13	155054
	2022/23	11.45	7.39	3.97	1.41	167556
NIC Asia Bank Limited	2013/14	10.45	5.99	4.46	1.41	36325.1
	2014/15	8.31	5.12	3.19	1.44	42144.3
	2015/16	7.77	4.41	3.36	1.31	58451.3
	2016/17	9.1	5.61	3.49	1.6	71584.6
	2017/18	10.12	6.53	3.6	1.83	120463
	2018/19	11.74	6.71	5.02	2.02	149497
	2019/20	10.39	6.21	4.18	2.05	172892
	2020/21	8.06	4.81	3.25	1.54	263060
	2021/22	10.82	7.41	3.41	1.95	266547
	2022/23	12.67	8.39	4.28	2.13	271738
Prabhu Bank Limited	2013/14	13.58	5.73	4.46	-1.44	10884.4
	2014/15	9.48	3.02	4.84	2.19	27726.2
	2015/16	7.45	2.66	5.09	1.64	43909.1
	2016/17	8.86	3.64	5.09	1.76	59179.3
	2017/18	10.46	5.58	4.72	0.86	76172
	2018/19	11.6	6.04	4.7	1.29	89753
	2019/20	11.04	5.31	3.57	0.71	103295
	2020/21	9.05	4.62	3.65	0.8	142480
	2021/22	11.71	6.32	4.32	0.82	151793
	2022/23	12.77	6.84	4.86	0.08	241130

(Source: Annual reports and financial results of sample banks 2013/14 to 2022/23)

APPENDIX – II

Data with Natural Logarithm Value of Loan and Advance for SPSS

Banks	Years	LIR (%)	DIR (%)	IRS (%)	ROA (%)	LnLA
Himalayan Bank Limited	2013/14	10.21	3.48	4.54	1.3	10.746
	2014/15	8.35	2.66	4.35	1.34	10.923
	2015/16	7.26	1.79	4.59	1.94	11.143
	2016/17	9.52	3.52	4.44	2.19	11.260
	2017/18	11.64	5.61	4.7	1.67	11.372
	2018/19	11.67	6.13	4.47	2.21	11.495
	2019/20	10.79	5.77	3.77	1.79	11.583
	2020/21	7.71	4.42	3.32	1.68	11.797
	2021/22	10.35	6.59	4.02	1.09	11.960
	2022/23	13.16	7.92	4.79	0.47	12.400
Nepal SBI Bank Limited	2013/14	9.55	4.02	3.45	1.5	10.471
	2014/15	9.65	3.37	3.85	1.64	10.596
	2015/16	8.53	2.22	4	1.59	10.757
	2016/17	9.51	3.4	3.68	1.57	11.069
	2017/18	11.94	5.6	4.99	1.97	11.228
	2018/19	12.72	6.49	4.43	1.94	11.392
	2019/20	12.1	6.4	3.87	1.17	11.456
	2020/21	8.87	5.13	3.18	0.7	11.528
	2021/22	9.81	6.08	4.36	1.07	11.615
	2022/23	12.32	7.38	3.99	1.06	11.718
Everest Bank Limited	2013/14	10.11	3.61	5.69	2.39	10.788
	2014/15	8.76	2.52	4.76	1.85	10.922
	2015/16	6.86	1.93	4.89	1.59	11.141
	2016/17	8.13	3.13	4.48	1.83	11.268
	2017/18	9.89	4.41	4.72	1.97	11.453
	2018/19	10.66	5.53	4.29	1.94	11.625
	2019/20	10.51	5.93	3.59	1.42	11.687
	2020/21	7.37	4.62	3.24	0.89	11.814
	2021/22	8.62	5.79	4.06	1.13	11.952
	2022/23	11.45	7.39	3.97	1.41	12.029
NIC Asia Bank Limited	2013/14	10.45	5.99	4.46	1.41	10.500
	2014/15	8.31	5.12	3.19	1.44	10.649
	2015/16	7.77	4.41	3.36	1.31	10.976
	2016/17	9.1	5.61	3.49	1.6	11.179
	2017/18	10.12	6.53	3.6	1.83	11.699
	2018/19	11.74	6.71	5.02	2.02	11.915
	2019/20	10.39	6.21	4.18	2.05	12.060
	2020/21	8.06	4.81	3.25	1.54	12.480
	2021/22	10.82	7.41	3.41	1.95	12.493
	2022/23	12.67	8.39	4.28	2.13	12.513
Prabhu Bank Limited	2013/14	13.58	5.73	4.46	-1.44	9.295
	2014/15	9.48	3.02	4.84	2.19	10.230
	2015/16	7.45	2.66	5.09	1.64	10.690
	2016/17	8.86	3.64	5.09	1.76	10.988
	2017/18	10.46	5.58	4.72	0.86	11.241
	2018/19	11.6	6.04	4.7	1.29	11.405
	2019/20	11.04	5.31	3.57	0.71	11.545
	2020/21	9.05	4.62	3.65	0.8	11.867
	2021/22	11.71	6.32	4.32	0.82	11.930
	2022/23	12.77	6.84	4.86	0.08	12.393

(Source: Natural logarithm of Loan and Advance calculated by MS Excel 2007)

IMPACT OF INTEREST RATES ON FINANCIAL ASSETS

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ABSTRACT This research investigates

the effect of interest rates on the financial **assets of commercial banks in**

Nepal, considering

Lending Interest Rate (LIR), Deposit Interest Rate (DIR) and **Interest Spread Rate**

(ISR) as independent variables while Return on Assets (ROA) and Loans and Advances (LnLA) serve as dependent variables.

The study employs a descriptive and causal-comparative design, analyzing data from five major banks: Himalayan

Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd., NIC Asia Bank Ltd , and Prabhu **Bank Ltd**

, over the period 2013/14 to 2022/23. Secondary data sources include annual reports, publications by Nepal Rastra Bank, and other financial documents. Descriptive statistics and inferential methods, such as correlation and regression analysis via SPSS Version 29, were utilized to examine the relationships between variables. The correlation analysis reveals that LIR and DIR have weak negative correlations with ROA, suggesting that an increase in these rates slightly reduces profitability, though the results are not statistically significant. ISR demonstrates a weak positive correlation with ROA, which is also not statistically significant. For LnLA, DIR exhibits a strong positive and statistically significant correlation, indicating that higher deposit interest rates are associated with increased loan growth, whereas LIR and ISR show weak and insignificant correlations with loan growth. Regression Model 1 indicates that LIR negatively affects ROA, while DIR and ISR show no significant influence. This model explains only a small fraction of the variation in ROA. Regression Model 2 reveals that LIR negatively affects loan growth, while DIR positively impacts loan growth, with ISR showing no significant effect. This model accounts for a larger proportion of the variation in loan growth, emphasizing a stronger relationship between interest rates