DETERMINANTS OF CAPITAL ADEQUACY RATIO OF NEPALESE COMMERCIAL BANKS

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 "**DETERMINANTS OF CAPITAL ADEQUACY RATIO OF NEPALESE COMMERCIAL BANKS**". The work of this dissertation has not been submitted previously for the purpose of conferral of any degree 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 declared that all information sources and literature used are cited in the reference section of the dissertation.

Aashma Parajuli
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REPORT OF RESEARCH COMMITTEE

Ms. Aashma Parajuli has defended research proposal entitled "**DETERMINANTS OF CAPITAL ADEQUACY RATIO OF NEPALESE COMMERCIAL BANKS**", 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 Asso. Prof. Dr. Kapil Khanal and submit the thesis for evaluation and viva voce examination.

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We have examined the dissertation entitled "**DETERMINANTS OF CAPITAL ADEQUACY RATIO OF NEPALESE COMMERCIAL BANKS**" presented by Ms. Aashma Parajuli for the degree of Masters of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

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Any remaining errors are mine.

Aashma Parajuli

TABLE OF CONTENT

	Page No.
Title Page	*i*
Certification of Authorship	*ii*
Report of Research Committee	*iii*
Approval Sheet	*iv*
Acknowledgement	*v*
Table of Content	*vii*
List of Table	*viii*
List of Figure	*ix*
Abbreviations	*x*
Abstract	*xi*
CHAPTER-I: INTRODUCTION	**1-6**
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Objectives of Study	4
1.4 Hypothesis of the Study	5
1.5 Rationale of the Study	5
1.6 limitations of the Study	6
CHAPTER-II: LITERATURE REVIEW	**7-29**
2.1 Theoretical Review	7
2.2 Empirical Review	14
2.2.1 Literature Review an International Context	14
2.2.2 Review in National Context	26
2.3 Research Gap	28
CHAPTER- III: RESEARCH METHODOLOGY	**29-38**
3.1 Research Design	29
3.2 Population and Sample	29
3.3 Nature and Sources of Data	30
3.4 Instrument of Data Collection	30
3.5 Methods of Analysis	30

3.5.1 Financial Analysis 30
3.5.2 Statistical Analysis 33
3.6 Research Framework 36
3.7 Definition of Variables 36

CHAPTER-IV: RESULT AND DISCUSSION 39-47
4.1 Result 39
4.1.1 Descriptive Statistics Analysis 39
4.1.2 Correlation Analysis 40
4.1.3 Regression Analysis 43
4.2 Discussion 46

CHAPTER-V: SUMMARY AND CONCLUSION 48-50
5.1 Summary 48
5.2 Conclusion 49
5.3 Implications 50

REFERENCES
APPENDIX

LIST OF TABLES

		Page No.
Table 1	Summary of Article Review	19
Table 2	Sample of the Bank	29
Table 3	Descriptive Statistics	40
Table 4	Correlation Analysis	41
Table 5	Model Summary	43
Table 6	ANOVA of Banks	44
Table 7	Coefficient of Bank	44

LIST OF FIGURES

		Page No.
Figure 1	Conceptual Framework	36

ABBREVIATIONS

ANOVA	:	Analysis of Variance
CAR	:	Capital Adequacy Ratio
CR	:	Credit Risk
DAR	:	Deposit to Assets Ratio
EBL	:	Everest Bank Limited
GDP	:	Gross Domestic Product
KBL	:	Kumari Bank Limited
LA	:	Loan to Assets
LR	:	Liquidity Risk
NBL	:	Nepal Bank Limited
ROA	:	Return on Assets
ROE	:	Return on Equity
S. D	:	Standard Deviation
SDC	:	Shanker Dev Campus
SPSS	:	Statistical Package for the Social Sciences
T.U.	:	Tribhuwan University

ABSTRACT

The objectives of the study are explore the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal, to analyze the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal and to examine the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. The descriptive and casual comparative research has been used for the analysis of the research. The secondary data are collected from the annual report of the bank. The descriptive statistics, correlation and regression analysis conducted for the research objective achieve. It is found that the different between the mean and maximum, minimum and maximum, mean and minimum is higher, the standard deviation is also higher so the all the dependent and independent variables current situation is fluctuating in nature. The relationship of return on assets, credit risk and loan to assets ratio is not significant to the capital adequacy ratio. The return on equity, liquidity risk, and deposit to assets ratio and gross domestic product is significant relationship to the capital adequacy ratio. The impact of Return on Assets and Return on Equity is significant to the capital adequacy ratio. The impact of Liquidity Risk, Credit Risk, Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product have not significant impact to the capital adequacy ratio.

Keywords: *Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product*

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The Capital Adequacy Ratio (CAR) gauges a bank's financial robustness and stability, especially in relation to its risk-weighted assets. Regulators utilize this metric to confirm that banks maintain sufficient capital to cover potential losses from their lending and investment operations. CAR is usually represented as a percentage and is determined by dividing a bank's capital by its risk-weighted assets (Thoa et al., 2020).

In this context, capital refers to the bank's core capital, including common equity, preferred stock, and certain reserves. Risk-weighted assets are a measure of a bank's assets, adjusted according to the risk level associated with each asset. For instance, cash and government securities generally have a lower risk weight than loans and other investments. The CAR is crucial as it ensures banks remain financially sound and capable of withstanding adverse economic conditions without becoming insolvent. Regulators often set minimum CAR requirements for banks to operate safely. Banks with higher CARs are generally viewed as more stable and less prone to failure. While different countries and regulatory bodies may vary in how they calculate CAR and the minimum required levels, the fundamental concept remains: it measures a bank's capital relative to its risk-weighted assets, indicating its financial health and ability to absorb losses (Sunaryo et al., 2020).

A commercial bank is a financial institution that offers a variety of services to individuals, businesses, and governments. These services typically encompass accepting deposits, providing loans, issuing credit cards, facilitating money transfers, and offering various investment products. Commercial banks play a vital role in the economy by acting as intermediaries between depositors and borrowers, enabling the flow of funds through loans and investments. Key characteristics of commercial banks include: Deposit-taking: Commercial banks accept deposits from individuals, businesses, and other entities. These deposits can be in the form of savings accounts, checking accounts, certificates of deposit (CDs), and other deposit products. Lending: Commercial banks provide loans and credit to

individuals and businesses, including mortgages, auto loans, personal loans, and business loans (El-Ansary et al., 2019).

Interest earned on loans is a primary revenue source for commercial banks. Credit creation: Commercial banks can create credit by lending a portion of the deposits they receive. This process, known as fractional reserve banking, allows banks to expand the money supply and stimulate economic activity. Financial intermediation: Commercial banks serve as intermediaries between savers and borrowers, channeling funds from depositors to those needing capital. This function helps allocate resources efficiently in the economy. Payment processing: Commercial banks facilitate payments and money transfers through services such as check clearing, electronic funds transfers (EFTs), wire transfers, and debit/credit card transactions. They provide the infrastructure necessary for the payment system's smooth functioning. Investment services: Some commercial banks offer investment products and services, such as brokerage services, wealth management, mutual funds, and retirement accounts, to help individuals and businesses grow their wealth. Commercial banks are subject to regulatory oversight by government authorities to ensure their stability, solvency, and compliance with laws and regulations. In many countries, central banks play a significant role in regulating and supervising commercial banks to maintain financial stability and protect depositors' interests (Abusharba et al., 2013).

Several key factors influence a bank's Capital Adequacy Ratio (CAR), collectively shaping its financial resilience and regulatory compliance. Firstly, regulatory requirements set by supervisory bodies establish minimum CAR thresholds, often based on international standards like the Basel Accords. These regulations provide the framework for evaluating a bank's capital adequacy relative to its risk exposure. Secondly, the composition of a bank's assets, particularly the associated risk levels, directly impacts its CAR. Assets are assigned risk weights based on credit risk, market risk, and operational risk, determining the capital needed to cover potential losses. Moreover, a bank's capital structure, including the proportion of Tier 1 and Tier 2 capital relative to risk-weighted assets, significantly affects its CAR. Tier 1 capital, which includes common equity and disclosed reserves, is crucial in bolstering the CAR. Effective risk management practices, such as credit risk assessment, asset quality monitoring, and stress testing, are also essential determinants. Sound risk management mitigates losses and ensures

that the bank maintains adequate capital reserves to withstand adverse events, thereby supporting a robust CAR. Additionally, factors like profitability, retained earnings, and external economic conditions impact the CAR. Profitable operations and retained earnings enhance the bank's capital base over time, strengthening its CAR. External factors such as economic downturns, market volatility, and regulatory changes can influence a bank's capital position and CAR. Overall, these determinants collectively shape the Capital Adequacy Ratio, reflecting the bank's financial stability and its capacity to absorb risks while complying with regulatory requirements (Naoaj, 2023).

1.2 Problem Statement

Determining the Capital Adequacy Ratio (CAR) in commercial banks presents several challenges that require careful consideration. One major issue arises from the complexity of regulatory requirements related to capital adequacy. Regulatory frameworks like the Basel Accords provide guidelines for calculating CAR, but these guidelines can be complex and open to interpretation. Ensuring compliance with these regulations necessitates expertise in risk management, financial reporting, and regulatory affairs, placing significant demands on bank management and resources (Gharaibeh, 2023). Additionally, accurately assessing the risk associated with various assets poses a significant challenge. Risk weighting involves assigning different risk levels to various asset types, such as loans, securities, and derivatives. Determining appropriate risk weights necessitates sophisticated models and data analytics, which may not always fully capture the extent of the risk. Inaccurate risk assessments can misrepresent the bank's capital adequacy and expose it to regulatory penalties or market skepticism (Alfadli & Djalila, 2022).

Another challenge is balancing capital adequacy with profitability and growth objectives. Maintaining a high CAR often requires holding more capital in reserve, which can limit lending and investment activities. Striking the right balance between preserving capital and generating revenue is crucial for sustaining business growth while ensuring financial stability. However, achieving this balance can be challenging, especially in dynamic economic environments with fluctuating risk profiles (Tran & Pham, 2022). Furthermore, the evolving nature of financial markets and products adds additional complexities. New financial instruments and market practices continually emerge, creating new challenges for risk management and capital

allocation. Staying updated on these developments and adjusting risk management strategies accordingly is essential for maintaining a robust CAR (Keqa, 2021).

Overall, calculating the CAR in commercial banks involves navigating a complex landscape of regulatory requirements, risk assessment methods, and strategic considerations. Effectively addressing these challenges requires a comprehensive approach that incorporates robust risk management practices, regulatory adherence, and prudent capital allocation strategies. Proactively tackling these challenges enables banks to strengthen their financial resilience and ensure long-term sustainability in a competitive and dynamic banking environment. The research question for the study is as follows:

- What are the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal?
- Is there any relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal?
- Do Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product have impact on the Capital Adequacy Ratio of the commercial bank in Nepal?

1.3 Objectives of Study

The study is the following objectives:

- To explore the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal.
- To examine the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal.
- To analyze the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal.

1.4 Hypothesis of the Study

A research hypothesis is a statement that proposes a relationship between variables in a research study. It is a tentative explanation or prediction about the outcome of the research based on existing theory, previous research findings, or logical reasoning. Research hypotheses are formulated to be tested empirically through data collection and analysis. They are:

H1: There is the significant relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal.

H2: There is the significant impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal.

1.5 Rationale of the Study

The study of determinants of capital adequacy in commercial banks is crucial for several reasons, providing a comprehensive understanding of the factors that influence the financial stability and resilience of banking institutions. Firstly, examining these determinants helps policymakers and regulators assess the effectiveness of existing regulatory frameworks and identify areas for improvement. By understanding which factors significantly impact a bank's capital adequacy ratio (CAR), regulators can refine capital adequacy standards to better mitigate systemic risks and enhance the overall stability of the financial system.

Secondly, for bank management, understanding the determinants of CAR is essential for strategic decision-making and risk management. By identifying the key drivers of capital adequacy, bank executives can implement proactive measures to maintain optimal capital levels, manage risk exposure, and ensure compliance with regulatory requirements. Moreover, insights into the determinants of CAR can inform capital allocation decisions, guiding investments in areas that contribute to enhanced financial strength and profitability while minimizing capital constraints.

Furthermore, researchers and academics can contribute to the literature on capital adequacy by investigating the underlying determinants through empirical analysis and theoretical modeling. By advancing our understanding of how various internal and external factors influence CAR,

researchers can contribute valuable insights to the broader body of knowledge in banking and finance. This research can inform best practices for capital management, risk assessment, and regulatory policy, benefiting both industry practitioners and policymakers.

Additionally, stakeholders such as investors, analysts, and rating agencies rely on information about a bank's capital adequacy when assessing its financial health and creditworthiness. A comprehensive understanding of the determinants of CAR enables stakeholders to make informed investment decisions, evaluate risk profiles, and assess the likelihood of future financial distress.

In summary, the study of determinants of capital adequacy in commercial banks is essential for informing regulatory policy, guiding strategic decision-making, advancing academic research, and facilitating informed assessments by stakeholders. By comprehensively examining the factors that influence CAR, stakeholders can work towards enhancing financial stability, promoting sustainable growth, and safeguarding the integrity of the banking sector.

1.6 limitations of the Study

The research is following limitations.

- Only ten-year data were used for the research.
- Data were taken from the website of the banks; it means all data are secondary data for studies.
- Only three sample banks were selected for studies.
- This study is based on historical figure.
- Financial analysis based on ratio calculation.
- Statistical tools like descriptive statistic, correlation and multiple regressions are used for data analysis.
- Excel and SPSS are the tools for data presentation, different statistical calculation and analysis.

CHAPTER-II

LITERATURE REVIEW

This section represents the essence of the research endeavor. The researcher achieves a thorough understanding of the topic by exploring it from diverse perspectives and scrutinizing every aspect. Here, "aspect" refers to each variable linked with the subject. The researcher delves into the theoretical and conceptual underpinnings of each variable, ensuring a foundational comprehension of its fundamental principles. Without grasping the intricacies of each concept related to the topic, the researcher cannot effectively proceed with subsequent work.

A literature review entails a meticulous examination and analysis of a particular segment within the existing body of knowledge. It entails summarizing, categorizing, and comparing prior studies, literature reviews, and theoretical works. The literature review is divided into three distinct sections, each devoted to specific studies that follow.

2.1 Theoretical Review

Capital Adequacy Ratio

The Capital Adequacy Ratio (CAR) stands as a crucial metric for evaluating the financial robustness and stability of commercial banks. It serves as a vital gauge of a bank's capacity to absorb potential losses and endure unfavorable economic conditions while maintaining operational functionality. Typically expressed as a percentage, the CAR is computed by dividing a bank's capital by its risk-weighted assets. Regulatory bodies enforce minimum CAR requirements to guarantee that banks uphold adequate capital reserves relative to their risk exposure. Capital, encompassing Tier 1 and Tier 2 capital, serves as a safeguard against unforeseen losses, with Tier 1 capital primarily comprising common equity and retained earnings. Risk-weighted assets reflect the risk level associated with a bank's assets, incorporating factors like credit risk, market risk, and operational risk. A higher CAR signifies a stronger financial stance, indicating sufficient capital to sustain operations and safeguard depositors' interests. Conversely, a lower CAR may indicate elevated risk and susceptibility to financial strain. Hence, monitoring the CAR is imperative for regulators, investors, and

stakeholders to evaluate a bank's resilience and ensure the stability of the broader financial system (Setiawan & Muchtar, 2021).

Return on Assets

Return on Assets (ROA) is a crucial financial measure grounded in the principles of profitability and asset utilization efficiency. Essentially, ROA indicates a company's capacity to generate profits in relation to its total assets, offering insights into the effectiveness of its operations and management. This metric derives its importance from several fundamental principles in finance and accounting. Firstly, ROA encapsulates the notion of profitability, illustrating the correlation between a company's earnings and the resources it employs. By dividing net income by average total assets, ROA quantifies the return generated per unit of asset investment, providing a standardized profitability measure that facilitates comparisons across companies and industries (AlZoubi, 2021).

ROA mirrors the effectiveness of asset utilization, underscoring the significance of optimizing resource allocation and operational efficiency. A heightened ROA implies the company excels in leveraging its assets to yield earnings, indicating robust management practices and operational efficiency. Conversely, a diminished ROA might signify deficiencies in asset management or underutilization of resources, prompting additional scrutiny into the company's operations and strategy (Thoa et al., 2020).

ROA is firmly rooted in the principle of evaluating financial performance, serving as a vital instrument for investors, analysts, and managers alike. Through analyzing a company's ROA over time and benchmarking it against industry standards, stakeholders can assess its financial well-being, profitability patterns, and competitive standing. ROA supports informed decision-making concerning investment allocation, strategic development, and performance tracking, empowering stakeholders to pinpoint areas needing enhancement and seize opportunities for value generation (El-Ansary & Hafez, 2015).

ROA is interconnected with broader financial theories and models like the DuPont analysis and the Capital Asset Pricing Model (CAPM), which delve into the underlying factors of profitability and risk-adjusted returns. These theoretical frameworks offer valuable insights into the determinants affecting ROA, such as revenue expansion, cost control, asset turnover,

and capital structure, thereby enhancing comprehension of financial performance dynamics (Abba et al., 2018).

Return on Equity

Return on Equity (ROE) stands as a crucial financial measure encapsulating vital principles of profitability, efficiency, and shareholder value enhancement. Founded in finance theory, ROE serves as a pivotal gauge of a company's capacity to yield returns for its shareholders concerning their equity investment. Essentially, ROE illustrates the correlation between a company's net income and its shareholders' equity, providing insights into both profitability and capital effectiveness (Sunaryo et al., 2020).

The concept of Return on Equity emphasizes that shareholders inject capital into a company with the anticipation of earning a return on their investment. ROE quantifies the profitability of this investment by dividing net income by shareholders' equity, expressing the percentage return generated on each unit of equity capital. A heightened ROE indicates robust profitability and value generation, implying that the company efficiently employs shareholders' funds to yield earnings (Ehiedu, 2022).

ROE mirrors the efficiency of capital utilization and asset management, highlighting the significance of maximizing returns while minimizing capital deployment. Companies achieving elevated ROE levels showcase proficiency in efficiently utilizing capital resources, enhancing operational efficiency, and fostering sustainable growth. Conversely, a diminished ROE might suggest inefficiencies in capital allocation or operational procedures, prompting additional examination into the company's strategy and management approaches (AlZoubi, 2021).

ROE is closely linked with financial theory and models that investigate the factors influencing profitability and shareholder value, such as the DuPont analysis and the Capital Asset Pricing Model (CAPM). These frameworks dissect the elements of ROE, such as profit margin, asset turnover, and financial leverage, offering a nuanced comprehension of the determinants affecting profitability and risk-adjusted returns (Gharaibeh, 2023).

ROE holds significant importance in shaping investment choices, capital distribution, and corporate strategy. Investors, analysts, and management teams utilize ROE as a pivotal performance indicator to evaluate a company's financial well-being, growth potential, and competitive standing. ROE facilitates informed decision-making by furnishing a standardized measure for performance assessment across companies and industries, empowering stakeholders to pinpoint avenues for value generation and allocate resources efficiently (Vu & Dang, 2020).

Liquidity Risk

Liquidity risk is a crucial concern in the management of financial institutions and markets, encompassing the potential inability to fulfill short-term obligations due to a lack of readily available funds. This risk emerges from the disparity between a firm's assets and liabilities regarding maturity and liquidity characteristics. Liquidity risk can manifest in various ways, including funding liquidity risk, which refers to the inability to secure necessary funding to meet obligations, and market liquidity risk, which involves challenges in buying or selling assets without significantly affecting their prices. One of the primary sources of liquidity risk is discrepancies in the maturity and liquidity profiles of assets and liabilities. Financial institutions often finance long-term assets with short-term liabilities, relying on the ability to roll over or refinance their obligations as they mature. However, disruptions in funding markets or shifts in investor sentiment can hinder access to short-term funding, leading to liquidity shortages and potential distress. Additionally, illiquid assets, such as certain types of loans or securities, may be challenging to sell quickly without incurring substantial discounts or losses, exacerbating liquidity risk (Sunaryo et al., 2020).

Financial institutions utilize a range of tactics to handle liquidity risk, such as upholding ample liquidity reserves, broadening funding channels, and meticulously tracking cash flows and liquidity indicators. Central banks and regulatory bodies also hold pivotal roles in alleviating liquidity risk by furnishing liquidity assistance facilities, executing stress assessments, and establishing prudent liquidity benchmarks to foster stability in the financial sector (El-Ansary & Hafez, 2015).

Credit Risk

Credit risk poses a notable challenge in the financial sector, involving the likelihood of borrowers failing to meet their obligations, leading to losses for lenders or investors. It constitutes a fundamental element of lending and investment endeavors, as financial institutions and investors face the risk of defaults or declines in the creditworthiness of borrowers. Credit risk emanates from multiple origins, encompassing loans, bonds, derivatives, and other financial instruments, and can significantly impact financial stability and profitability (Abusharba et al., 2013).

Lending activities stand out as a key contributor to credit risk, involving financial institutions granting credit to individuals, businesses, or governments. These loans may entail default risk, indicating the borrower's incapacity or reluctance to repay the principal and interest as outlined in the loan contract. Assessing credit risk is vital in gauging the creditworthiness of borrowers, considering factors like their financial status, ability to repay, collateral, and credit background. Effective credit risk management entails establishing stringent underwriting criteria, conducting comprehensive due diligence, and overseeing credit exposures vigilantly to minimize potential losses (Tran & Pham, 2022).

Credit risk also applies to investments in fixed income instruments like bonds and asset-backed securities, exposing investors to the possibility of issuer default or downgrade. The creditworthiness of these securities relies on the issuer's capacity to fulfill its deposit obligations, alongside macroeconomic variables, industry circumstances, and market sentiment. Investors evaluate credit risk by scrutinizing credit ratings provided by rating agencies, conducting fundamental assessments of the issuer's financial condition, and considering market elements that could influence creditworthiness (Gharaibeh, 2023).

Derivatives and alternative financial instruments can also introduce credit risk, especially in counterparty transactions where one party might not meet its contractual commitments. Counterparty credit risk emerges from the possibility of default by the counterparty or adverse alterations in its creditworthiness, resulting in financial losses or disruptions in the derivatives market. Market players handle counterparty credit risk via bilateral agreements, collateralization, and netting arrangements to alleviate potential exposures (Naoaj, 2023).

Deposit to Assets Ratio

The Deposit to Assets Ratio is a significant financial measure utilized to assess the funding composition and liquidity status of financial institutions, especially banks. It gauges the percentage of a bank's overall assets financed by customer deposits, offering insights into the dependency on deposit funding for liquidity and stability. Computed by dividing total deposits by total assets, the Deposit to Assets Ratio is expressed as a percentage and serves as a crucial indicator of the bank's capacity to fulfill short-term obligations and handle liquidity risk (Abusharba et al., 2013).

A heightened Deposit to Assets Ratio signifies an increased dependence on customer deposits to finance the bank's operations and investments. Customer deposits are typically viewed as a stable and economical funding source, furnishing banks with a steady and dependable liquidity source to bolster lending endeavors and other investment avenues. Additionally, banks with elevated deposit ratios may be perceived as more dependable and financially robust, given their larger reservoir of customer funds to address potential withdrawals and unforeseen circumstances (Sudiyatno et al., 2019).

Loan to Assets

The Loan to Assets ratio serves as a financial indicator utilized to evaluate the degree to which a company's assets are funded through loans. It offers valuable insights into the company's dependence on deposit financing to sustain its operations, investments, and expansion endeavors. Calculated by dividing the total outstanding loans or borrowings by the total assets of the company, this ratio is usually expressed as a percentage (Thoa et al., 2020).

An elevated Loan to Assets ratio suggests that a greater portion of a company's assets are financed through loans, indicating heightened financial leverage and risk exposure. While deposit financing can offer companies capital access for expansion and investment prospects, an overreliance on loans may elevate vulnerability to fluctuations in interest rates, economic circumstances, and market dynamics. Substantial deposit levels may also result in increased interest costs, diminished financial adaptability, and heightened default risk, potentially compromising the company's capacity to fulfill its deposit commitments and sustain profitability (Setiawan & Muchtar, 2021).

Gross Domestic Product

Gross Domestic Product (GDP) acts as a foundational gauge of a nation's economic performance and general economic well-being. It reflects the aggregate monetary worth of all goods and services generated within a country's borders during a designated timeframe, commonly a year or a quarter. GDP encompasses a range of economic endeavors, including consumption, investment, government outlays, and net exports, offering a comprehensive overview of an economy's magnitude and expansion (Vu & Dang, 2020).

As a pivotal gauge of economic productivity, GDP holds a central position in guiding government policy formulation, business strategy development, and financial market evaluation. Governments utilize GDP information to evaluate patterns in economic growth, devise fiscal and monetary policies, and distribute resources to foster economic stability, employment generation, and societal well-being. Central banks and policymakers also depend on GDP indicators to analyze inflationary tendencies, evaluate labor market conditions, and modify interest rates and monetary policy measures as needed.

Corporations and investors utilize GDP information to evaluate market circumstances, pinpoint avenues for growth, and make strategic investment choices. Variations in GDP growth rates can affect consumer sentiment, corporate investments, and market outlooks, thereby influencing corporate profits, stock market results, and asset valuations. Additionally, global investors and institutions employ GDP contrasts to appraise the relative economic progress of diverse nations and regions, guide investment distribution determinations, and evaluate global economic trends and vulnerabilities (AlZoubi, 2021).

GDP statistics are commonly presented in nominal terms, which depict prevailing market prices, and in real terms, which are adjusted for inflation to offer a more precise gauge of economic expansion. Furthermore, GDP can be disaggregated into categories like consumption, investment, government expenditure, and net exports to scrutinize the factors propelling economic performance and detect sectors of vigor or fragility within the economy.

2.2 Empirical Review

2.2.1 Literature Review an International Context

Naoaj (2023) investigated the determinants of commercial banks' capital adequacy in Bangladesh by analyzing panel data from 28 banks spanning 2013-2019. They utilized three analytical methods: Fixed Effect model, Random Effect model, and Pooled Ordinary Least Square (POLS) method, to examine the Capital Adequacy Ratio (CAR) and Tier 1 Capital Ratio. The study found significant impacts of several independent variables on capital adequacy. Leverage and liquidity risk were negatively and positively correlated, respectively, while real GDP and net profit showed positive correlations, and inflation showed a negative correlation with capital adequacy. For the Tier 1 Ratio, the study found no significant relationship with leverage and liquidity risk but positive correlations with the number of employees, net profit, and real GDP, and negative correlations with size and GDP deflator. The Pooled OLS analysis indicated negative correlations with leverage, size, and inflation for both CAR and Tier 1 Capital Ratio, and positive correlations with liquidity risk, net profit, and real GDP.

Gharaibeh (2023) examined the determinants of the capital adequacy ratio (CAR) in Jordanian banks through a literature review and empirical analysis. Using data from 2003 to 2021 from various sources, they employed autoregressive distributed lag (ARDL) analysis with Econometric Views (EViews) software. The results revealed short-run causal relationships from credit-to-deposits ratio, leverage ratio, liquidity ratio, and one-year-lagged ROE to CAR. Long-run associations were found between CAR and several factors, including leverage ratio and liquidity ratio. The study underscored the significance of comprehending factors influencing CAR in emerging economies like Jordan for maintaining banking industry stability.

Ehiedu (2022) explored micro prudential determinants of Capital Adequacy Ratio (CAR) for deposit money banks (DMDs) in Nigeria. Using data from CBN statistical bulletin, CBN bank supervisory annual report, and NDIC annual report, they employed stationary tests, descriptive statistics, correlation, and multiple regression analysis. The study found significant effects of profitability, liquidity ratio, bank size, total loan and advances to total assets ratio, and total deposits to total assets ratio on CAR of banks in Nigeria.

Alfadli and Djalila (2022) identified factors influencing bank capital adequacy ratios in GCC countries using data from 62 commercial banks listed on stock markets from 2011 to 2018. They utilized the PCSE method to address dataset issues. The empirical findings highlighted positive influences of capital ratio, management efficiency, earning capacity, liquidity management, and sensitivity, while asset quality, market concentration, and bank size had negative effects on commercial banks' capital adequacy ratios. Additionally, economic growth and inflation rate were noted to influence bank capital adequacy ratios.

Tran and Pham (2022) examined the factors influencing the capital adequacy of Vietnamese commercial banks from 2007 to 2018. Utilizing the feasible generalized least squares (FGLS) estimator, their findings revealed significant impacts of internal and macroeconomic factors on capital adequacy. Return on equity (ROE) and bank size (SIZE) exhibited opposite effects on Vietnamese banks' capital adequacy, while return on assets (ROA), customer deposits (DEP), credit risk (CR), and liquidity (LIQ) demonstrated similar directional effects and statistically significant impacts. Additionally, the study highlighted the importance of internal control and performance enhancement for Vietnamese commercial banks to meet Basel standards amidst globalization.

Keqa (2021) assessed the influence of liquidity, profitability, size, loans, and capital structure on the capital adequacy ratio (CAR) of banks in the Western Balkan region using data from 103 commercial banks operating in Western Balkan countries between 2010 and 2018. Employing the panel data fixed effect method, the study found that profitability, proxied by return on assets (ROA), had the most substantial impact on CAR among financial ratios examined. Moreover, liquidity and size demonstrated statistically significant positive effects on CAR, while the leverage ratio exhibited a negative impact. The study suggested that achieving capital adequacy requirements necessitates favorable indicators of performance, liquidity, and size.

Setiawan and Muchtar (2021) investigated the determinants of bank capital adequacy ratios using a sample of 42 banks listed on the Indonesia Stock Exchange from 2015 to 2019. Employing panel data regression and purposive sampling, the study examined the effects of

loan loss reserves, return on equity, bank size, liquidity ratio, and loan ratio on the capital adequacy ratio. The findings revealed that bank size and return on equity positively influenced the capital adequacy ratio, whereas the loan ratio had a negative impact. However, the liquidity ratio and loan loss reserves did not significantly affect the capital adequacy ratio. The study recommended that banking companies increase total assets, enhance return on equity, and decrease bank loan ratios to mitigate credit risk.

AlZoubi (2021) presented evidence suggesting that overcapitalized banks in Jordan are more sensitive to fundamental factors than to regulatory requirements such as those outlined in the Basel Accord. This raises concerns about the adequacy of Basel's limits in mitigating financial crises, indicating that maintaining buffers against falling below minimum requirements is of secondary importance. The study identified three fundamental factors influencing capital adequacy: risk, return, and activity. Risk indicators were found to decrease capital adequacy ratios, with return on average assets (ROAA) exerting the most significant impact. Banks tend to fuel their capital internally following the pecking order theory and raise capital when their activities, measured by the loan-to-asset ratio, improve. Additionally, the study revealed that banks systematically important hold less capital, suggesting the presence of moral hazard.

Vu and Dang (2020) examined the factors significantly affecting the capital adequacy ratio (CAR) of Vietnamese commercial banks from 2011 to 2018, during which the number of banks decreased from 41 to 31 due to mergers and acquisitions. The study considered variables hypothesized to impact the CAR, including bank size (SIZE), deposits (DEP), loans (LOA), loan loss reserves (LLR), liquidity (LIQ), return on assets (ROA), return on equity (ROE), net interest margin (NIM), non-performing loans (NPL), and leverage (LEV). Results indicated that LEV, LLR, and ROE had negative impacts, while ROA had a positive impact. However, SIZE, DEP, LOA, LIQ, NIM, and NPL did not significantly influence the CAR of Vietnamese commercial banks.

Thoa et al. (2020) investigated the determinants of Vietnamese banks' capital adequacy ratio (CAR) focusing on internal banking factors. Secondary data from banks' annual reports spanning from 2009 to 2015 was collected. The study employed the FGLS method and panel data to examine a regression model with CAR as the dependent variable and five independent variables: bank size (SIZE), loans (LOA), loan loss reserves (LLR), liquidity (LIQ), and

profitability (ROE). Results indicated that SIZE and LIQ had negative impacts on CAR significantly, while LLR and LOA negatively influenced CAR but were statistically insignificant.

Sunaryo et al. (2020) identified factors influencing the adequacy ratio of funds (RKD) in the Defined Benefit Pension Plan (PPMP) Pension Fund from 2009 to 2018. These factors included Return on Asset (ROA), Cash Conversion Rate (CCR), Central Board Revenue (CBR), Operating Expense Ratio (OER), Investment Expense Ratio (IER), and investment. Using common effect panel data regression on a sample of twenty pension funds, the study found that ROA, CCR, and investment had a significant and positive influence on RKD, while CBR and OER had a significant and negative influence. However, IER did not significantly influence RKD.

El-Ansary et al. (2019) conducted a comparative analysis of capital adequacy ratio (CAR) determinants between Islamic and conventional banks. Using GMM on annual data from 38 Islamic banks (IBs) and 75 conventional banks (CBs) across 10 MENA countries from 2009 to 2013, the study found significant associations between CAR and bank size, operational efficiency, and GDP growth rate in both IBs and CBs, with CAR affecting these variables retroactively in the long run. Additionally, IBs showed a significant association between CAR and deposits to assets ratio, while CBs exhibited associations between CAR and profitability, credit risk, and portfolio risk.

Sudiyatno et al. (2019) investigated the determinants of the capital adequacy ratio in conventional banks listed on the IDX from 2014 to 2017. Employing purposive sampling and analyzing panel data with E Views 8 software, the study found that bank performance and the efficient ratio had no effect on the capital adequacy ratio. However, bank size and loan-to-deposit ratio had a significant negative effect, while equity had a positive and significant effect on the capital adequacy ratio.

Abba et al. (2018) conducted an analysis of the bank-specific determinants of Capital Adequacy Ratio (CAR) in Nigerian Deposit Money Banks (DMBs) using balanced panel data from financial statements of 12 selected quoted banks over the period 2005-2014. The study identified Return on Assets (ROA) as the most crucial determinant of CAR, with the highest

coefficient in the multiple regression results. It was observed that Nigerian DMBs' CAR exceeded both the regulatory minimum set by the Central Bank of Nigeria (CBN) and the requirements of the Basel Accord. Despite this, Nigerian banks exhibited a high-risk portfolio and relatively low ROA. The study concluded that CAR is mainly influenced by banks' risk portfolio, deposit level, profitability, and asset quality, emphasizing the adequacy of Nigerian banks' CAR compared to regulatory standards. Recommendations included the adoption of more pragmatic risk management mechanisms, a risk-based capital maintenance approach supported by robust data management systems, improved operational performance, strict compliance with capital regulations, frequent stress tests, and enhanced disclosure practices.

El-Ansary and Hafez (2015) investigated the explanatory factors influencing the Capital Adequacy Ratio (CAR) in Egyptian commercial banks. Analyzing data from 36 banks during the period 2004-2013, they examined the relationship between CAR (dependent variable) and various independent variables, including earning assets ratio, profitability, liquidity, loan loss provision (as a measure of credit risk), net interest margin growth, size, loan assets ratio, and deposit assets ratio. The study also explored CAR determinants before and after the 2007-2008 international financial crises. Results varied across periods: liquidity, size, and management quality were significant variables for the entire 2003-2013 period, while asset quality, size, and profitability were significant before 2008, and asset quality, size, liquidity, management quality, and credit risk were significant after 2009, explaining the variance in Egyptian banks' CAR.

Dreca (2014) conducted an analysis of a dataset comprising observations from 10 banks over a six-year period in Bosnia and Herzegovina to examine the factors influencing the Capital Adequacy Ratio (CAR). The study investigated variables such as capital structure, bank size, profitability indicators, the proportion of deposits and loans in total assets, and leverage. Through various methods and diagnostic tests, the study aimed to identify the most suitable model explaining the determinants of CAR. Results revealed that bank size (SIZE), deposits (DEP), loans (LOA), return on assets (ROA), return on equity (ROE), and leverage (LEV) had significant effects on CAR. Conversely, loan loss reserves (LLR) and net interest margin (NIM) did not exhibit significant effects on CAR. Among the significant variables, SIZE, DEP, LOA, and ROA negatively influenced CAR, while LLR, ROE, NIM, and LEV were positively

associated with CAR. Although stability favors a higher CAR, lower CAR is preferable for profitability. Hence, banks should determine their target CAR levels based on this study's findings.

Abusharba et al. (2013) analyzed the determinants of the capital adequacy ratio in the Indonesian Islamic banking industry using secondary data from annual reports and banking statistics from Bank Indonesia spanning from 2009 to 2011. Employing multiple linear regression analysis and pair-wise correlation matrix, the study examined the impact of explanatory variables—profitability (ROA), assets earning quality (NPF), deposits structure (DEP), liquidity (FDR), and operational efficiency (OEOI)—on the capital adequacy ratio (CAR). Findings indicated a positive relationship between profitability and liquidity with capital adequacy requirements. However, nonperforming financing (NPF), representing uncollectable funds, showed a significant negative relationship with CAR. Depositors' funds and operational efficiency were found to have no significant effect on the capital adequacy of Indonesian Islamic banks. Moreover, all selected Islamic commercial banks in Indonesia maintained capital levels exceeding the minimum requirements during the global financial crisis, indicating ample funds to meet obligations and protect capital owners.

Table 1

Summary of Literature Review

Author and date	Title	Objectives	Methodology	Finding
Naoaj /(2023)	Exploring the Determinants of Capital Adequacy in Commercial Banks: A Study of Bangladesh's Banking Sector	To investigated the factors that influence the capital adequacy of commercial banks in Bangladesh.	Three analytical techniques, namely the Fixed Effect model, Random Effect model, and Pooled Ordinary Least Square (POLS) method, were utilized to assess two variants of the	The research indicates that capital adequacy is notably influenced by various independent variables. Specifically, leverage exhibits a negative relationship, while liquidity risk demonstrates a positive association. Furthermore, a positive correlation is observed between real GDP and net profit with capital adequacy, whereas inflation shows a negative correlation. In terms of the Tier 1 Ratio, no significant relationship is

			capital adequacy ratio.	found between leverage and liquidity risk. However, a positive correlation is identified with the number of employees, net profit, and real GDP, while a negative correlation is noted with size and GDP deflator. Pooled OLS analysis unveils a negative correlation with leverage, size, and inflation for both CAR and Tier 1 Capital Ratio, along with a positive correlation with liquidity risk, net profit, and real GDP.
Gharaibeh /(2023)	The Determinants of Capital Adequacy in the Jordanian Banking Sector: An Autoregressive Distributed Lag-Bound Testing Approach.	To examine the determinants of the capital adequacy ratio (CAR) in the context of Jordanian banks through a literature review and analysis of empirical evidence.	The collective data utilized in the study were sourced from various platforms including Globaleconomy.com, the Financial Soundness Indicators, the Central Bank of Jordan, and World Bank Data, spanning from 2003 to 2021. These compiled data sets underwent analysis through autoregressive distributed lag (ARDL) methodology, employing Econometric	The empirical findings indicate a short-term causal link extending from banks' credit-to-deposits ratio, leverage ratio, liquidity ratio, and one-year-lagged return on equity (ROE) to the Capital Adequacy Ratio (CAR). Additionally, the results suggest a short-term causal relationship from the capital-to-assets ratio, one-year-lagged capital-to-asset ratio, liquid-assets-to-deposits ratio, and coverage ratio to CAR. Furthermore, the analysis reveals positive long-term associations between CAR and both leverage ratio and liquidity ratio. Moreover, a positive and noteworthy long-term correlation was identified between CAR and the capital-to-assets ratio and the ratio of liquid assets to deposits. Conversely, the coverage ratio exhibited a negative and statistically significant long-term relationship with CAR.

			Views software for the analysis process.	
Ehiedu /(2022)	Analysis of micro prudential determinants of capital adequacy in deposit money banks.	To measure of micro prudential determinants of CADMBs.	The study utilized data extracted from the CBN statistical bulletin, CBN bank supervisory annual report, and NDIC annual report. Subsequently, the data underwent stationary and normality tests, followed by descriptive statistics, correlation analysis, and multiple regression analysis tools.	The results indicated that PROF has a negligible negative impact on the CAR of Nigerian banks; LIQR exerts a significant negative effect on the CAR of banks in Nigeria; BS demonstrates a noteworthy positive effect on the CAR of banks in Nigeria; RTLADTA exerts a significant positive effect on the CAR of banks in Nigeria, while RTDTA has a negligible positive impact on the CAR of banks in Nigeria.
Alfadli and Djalila/ (2022)	Factors Affecting Commercial Banks' Capital Adequacy Ratios in Gulf Cooperation Council (GCC) Countries.	To identified factors that influence bank capital adequacy ratios for a sample of consists of 62 commercial banks	To deal with the problems of the data set, we utilize the PCSE method.	The empirical findings indicated that within the CAMELS model variables, factors such as capital ratio, management efficiency, earning capacity, liquidity management, and sensitivity exhibited a statistically significant positive influence on bank capital adequacy ratios. Conversely, asset quality, market concentration, and bank size demonstrated a negative impact on commercial banks' capital adequacy ratios.

Tran and Pham (2022)	Factors influencing the capital adequacy ratio: A panel regression analysis for the Vietnamese banking sector.	To determine the internal and macro factors affecting Vietnamese commercial banks.	Utilizing the feasible generalized least squares (FGLS) estimator, our findings indicated a notable contrast in the impact of return on equity (ROE) and bank size (SIZE) on the capital adequacy of Vietnamese banks.	However, return on assets (ROA), customer deposits (DEP), credit risk (CR), and liquidity (LIQ) had similar direction effects and were statistically significant on banks' capital adequacy. For the macroeconomic factors, the inflation rate positively impacted the capital adequacy of Vietnamese commercial banks. Besides, our results revealed that Vietnamese commercial banks.
Keqa/ (2021)	The Determinants of Banks 'capital Adequacy Ratio: Evidence from Western Balkan Countries.	To evaluate the impacts of liquidity, profitability, size, loans and capital structure on banks 'capital adequacy ratio (CAR).	Panel data fixed effect method is employed. The data comprises of a total 51 observations for panel least squares.	The empirical findings obtained panel data regression show that profitability proxies by the return on asset (ROA) have the largest impact on CAR among other financial ratios. In addition, liquidity and size have statistically significant positive effects in determining capital adequacy ratio for the banks in the region, unlike leverage ratio. However, the leverage ratio has a negative impact on the capital adequacy ratio.
Setiawan and Muchtar /(2021)	Factor affecting the capital adequacy ratio of banks listed in Indonesia Stock Exchange.	To conclude the factors that affect bank capital adequacy ratios	The analysis method used was panel data regression and using purposive sampling for the sampling technique.	The results show that bank size and the return on equity have a positive effect on capital adequacy ratio, while loan ratio has a negative effect on capital adequacy ratio. The liquidity ratio and loan loss reserve have no effect on the capital adequacy ratio. It is expected that the results of this study will provide a reference for companies to understand

				the factors that affect capital adequacy.
AlZoubi /(2021)	Bank capital adequacy: The impact of fundamental and regulatory factors in a developing country.	To provide evidence that the overcapitalized banks are much more sensitive to fundamental factors rather than to the regulatory requirements	Also, keeping buffers against falling below the minimum requirements appear to be of second order importance.	Return on average assets (ROAA) has the most significant impact among all factors. Banks internally fuel their capital following the pecking order theory and raise capital whenever their activities, as indicated by the loan-to-asset ratio, improve. Return on average equity (ROAE) acts as a cost factor; banks avoid issuing capital when the cost of common equity is high.
Vu and Dang (2020)	Determinants influencing capital adequacy ratio of Vietnamese commercial banks.	To identified the factors that significantly affect the capital adequacy ratio (CAR) of Vietnamese commercial banks	Correlation and regression analysis conducted.	The results indicate that leverage (LEV), loan loss reserves (LLR), and return on equity (ROE) had a negative impact on the CAR of Vietnamese commercial banks, while return on assets (ROA) had a positive impact. However, bank size (SIZE), deposits (DEP), loans (LOA), liquidity (LIQ), net interest margin (NIM), and non-performing loans (NPL) did not significantly influence the CAR.
Thoa, Anh and Minh/ (2020)	The determinant of capital adequacy ratio: Empirical evidence from Vietnamese banks (a panel data analysis).	To investigated the determinant of Vietnamese banks' capital adequacy ratio (CAR) by internal banking factors.	Secondary data is collected from banks' annual reports. FGLS method and panel data are used to examine a regression model.	The results show that bank size (SIZE) and liquidity (LIQ) have a significant negative impact on CAR. Conversely, loan loss reserves (LLR) and loans (LOA) also negatively affect CAR, but these effects are insignificant.
Sunaryo, Santoni, Endri and	Determinants of capital adequacy	To identified factors that influence	The data analysis was common	The results indicated that ROA, CCR, and investment significantly and positively

Harahap/ (2020)	ratio for pension funds: a case study in Indonesia.	adequacy ratio of fund (RKD) of the Defined Benefit Pension Plan	effect panel data regression method and the samples were twenty pension funds.	influence RKD, while CBR and OER have a significant and negative impact on RKD. IER did not have a significant influence on RKD.
El-Ansary, El-Masry and Yousery /(2019)	Determinants of capital adequacy ratio: An empirical study on Egyptian banks.	To conduct a comparative analysis of CAR determinants between Islamic and conventional banks.	The analysis utilized GMM on annual data from 38 Islamic banks (IBs) and 75 conventional banks (CBs) across 10 MENA countries during the period from 2009 to 2013.	The results indicate that both IBs and CBs have a significant relationship between CAR and factors such as bank size, operational efficiency, and GDP growth rate, with CAR being impacted retroactively in the long run. For IBs specifically, there is a significant association between CAR and the deposits to assets ratio.
Sudiyatno, Puspitasari, Susilowati, Sudarsi and Udin /(2019)	Determinants of capital adequacy ratio: An empirical study on the conventional banks in indonesia	To determine of the capital adequacy ratio.	The purposing sampling technique was used in this study to determine the sample. The data panel is analyzed using E Views 8 software.	The results indicate that bank performance, efficiency ratio, and non-performing loans do not affect the capital adequacy ratio. Conversely, bank size and the loan-to-deposit ratio have a significant negative impact on the capital adequacy ratio. Additionally, equity has a significant positive effect on the capital adequacy ratio.
Abba, Okwa, Soje and Aikpitanyi /(2018)	Determinants of capital adequacy ratio of deposit money banks in Nigeria.	To analyze the bank-specific determinants of CAR in the Nigerian Deposit Money.	To using balanced panel data collected from financial statements of 12 selected quoted banks for the ten-year period 2005-2014.	The study found that the Capital Adequacy Ratio (CAR) of Nigerian deposit money banks significantly exceeds the regulatory minimum set by the CBN and the Basel Accord requirements. Additionally, Nigerian banks have a high-risk portfolio and a low Return on Assets (ROA). Depositors' interests are well protected, as the asset base of these banks is

				much greater than the total deposits. The study concludes that CAR is primarily influenced by the banks' risk portfolio, deposit levels, profitability, and asset quality, and confirms that the CAR of Nigerian banks is well above the regulatory minimum.
El-Ansary and Hafez /(2015)	Determinants of capital adequacy ratio: An empirical study on Egyptian banks.	To examine explanatory victors that influence capital adequacy ratio (CAR) in the Egyptian commercial banks.	The study covers 36 banks They examined the relationship.	The results vary depending on the period studied. For the entire period from 2003 to 2013, liquidity, size, and management quality emerged as the most significant variables. Prior to 2008, asset quality, size, and profitability were identified as the most significant variables.
Abusharba, Triyuwono, Ismail and Rahman/ (2013)	Determinants of capital adequacy ratio (CAR) in Indonesian Islamic commercial banks.	To analyze the determinants of the capital adequacy ratio in the Indonesian Islamic banking industry.	Secondary data Multiple linear regression analysis and pair-wise correlation matrix are used	The study found that profitability and liquidity are positively associated with capital adequacy requirements. Conversely, uncollectable funds, measured by nonperforming financing (NPF), have a significant but negative relationship with the capital adequacy ratio. However, depositor's funds and operational efficiency do not have a significant effect on the capital adequacy of Indonesian Islamic banks.
Dreca /(2014)	Determinants of capital adequacy ratio in selected Bosnian banks.	To analysis of a data set of observation for 10 banks in period of 6 years in B&H shows how Capital Adequacy Ratio.	Selected variables are chosen on the previous research and analysis is done through several methods and some diagnostics	The data analysis suggests that SIZE, DEP, LOA, ROA, ROE, and LEV significantly influence CAR. However, LLR and NIM do not exhibit a significant effect on CAR. Among these variables, SIZE, DEP, LOA, and ROA have a negative impact on CAR, while LLR, ROE, NIM, and LEV are positively associated

	tests are performed in order to determine the most appropriate model that explains determinants of CAR.	with CAR. All variables, except LOA and ROA, show the expected signs. Determining whether a higher or lower CAR is preferable is challenging; while a higher CAR enhances stability, a lower CAR may be more favorable for profitability. Therefore, banks should base their decisions on which variables to prioritize in achieving their targeted CAR levels on this study's findings.

2.2.2 Review in National Context

Shrestha (2023) conducted a study to identify the factors influencing the CAR of commercial banks in Nepal. Using annual panel data from six joint venture commercial banks spanning from 2007 to 2021, the study found that financial performance, as measured by ROE, and lending policy, indicated by the ratio of total loans and advances to total assets (LTA), have an inverse relationship with CAR. On the other hand, liquidity (LTD), management efficiency (ME), operational efficiency (OE), and bank size (SIZE) were found to positively impact the capital adequacy ratio. The study suggests that bank management could utilize these findings to maintain an adequate capital adequacy ratio.

Timilsina (2020) investigated the determinants of capital structure in Nepalese commercial banks. Utilizing secondary data from 16 commercial banks with 112 observations covering the period from 2011/12 to 2017/18, the study examined the total deposit-to-total-assets ratio and total deposit-to-total-equity ratio as dependent variables. Independent variables included return on assets, bank size, asset tangibility, asset growth, and liquidity. Data were collected from the annual reports of the sample banks, and Pearson's correlation coefficients and regression models were estimated to assess the significance and impact of bank-specific factors on capital structure. Results showed that bank size and asset tangibility were positively correlated with the total deposit-to-total-assets ratio, while return on assets, asset growth, and liquidity were negatively correlated with it. Similarly, return on assets, bank size, asset tangibility, asset growth, and liquidity were negatively correlated with the total deposit-to-total-equity ratio.

Pokhrel (2018) conducted an analysis of the asset and liability composition, asset utilization, and deposit and loan trends for joint venture finance in Nepal. The study found that both NABIL and HBL performed admirably in collecting total deposits, with HBL exhibiting superior performance in cash and bank balance positions. EBL demonstrated a rising trend in net profit.

Subedi (2018) concentrated on the comparison of total costs to deposits, the relationship between staff expenses and interest, and operating expenses with total costs, as well as the proportion of staff expenses and operating expenses relative to net profit for EBL. Results revealed fluctuations in the total cost to net profit ratio, a growth in staff expenses, and a positive correlation between staff expenses and net profit.

Paudel and Khanal (2015) assessed the determinants of the capital adequacy ratio of Nepalese cooperative societies through descriptive, correlation, and regression analyses using unbalanced panel data from 2009 to 2013. They found that credit-to-deposit ratio, net interest margin, and cooperative type had a positive impact on the capital adequacy ratio, while asset utilization ratio, size, and return on equity had a negative impact.

Malla (2015) investigated the liquidity management of a sample finance institution, analyzing deposit and investment positions, the relationship between deposits, investments, loans, advances, and net profit, and conducting trend analysis. The major finding indicated that the finance institution maintained high liquidity ratios, with NABIL having a higher total liability to total assets ratio compared to HBL.

Shakya (2014) conducted an examination of the financial performance of selected JVBs, with a focus on NGBL and HBL. The study observed that HBL displayed superior efficiency in liquidity and leverage when compared to NGBL. Additionally, HBL outperformed in terms of capital adequacy, activity, and profitability ratios. Analysis indicated a positive correlation between loans and advances to total deposits for both banks, while NGBL exhibited a higher growth rate in profit before tax.

Shrestha (2012) evaluated the investment policies and strategies of the examined banks, revealing that SCBL possessed the highest mean current ratio, whereas NABIL had the lowest current ratio. NABIL maintained the highest cash and bank balance to total deposit ratio.

Overall, the banks demonstrated moderate performance in maintaining the investment to total deposit ratio, with SCBL exhibiting the highest earning power capacity.

2.3 Research Gap

This study employs correlation and regression analysis to explore the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Leverage Ratio, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal. To analyze the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Leverage Ratio, and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. To examine the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Leverage Ratio, and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. The sample comprises three banks selected from a total of 20 banks, using a combination of cluster and random sampling methods. The study spans a period of ten years, and a descriptive research design is employed to achieve the research goals.

Previous researches used more than three banks; they used other techniques such as panel analysis etc. for data analysis. Timilsina (2020) used secondary data of 16 commercial banks with 112 observations for the period 2011/12 to 2017/18.The total deposit to total assets and total deposit to total equity were selected as dependent variables while return on assets, bank size, assets tangibility, assets growth and liquidity are the independent variables. Most of them used a five to eight years of data for analysis. Shrestha (2023) used 6 joint venture commercial banks of Nepal from 2007 to 2021.

CHAPTER- III

RESEARCH METHODOLOGY

The research methodology serves as a set of defined procedures and techniques employed to identify, select, process, and analyze information related to a particular topic. Within a research paper, the methodology section provides the reader with the means to critically assess the overall validity and reliability of the study. This chapter outlines the comprehensive roadmaps followed in conducting the research.

3.1 Research Design

This research has utilized descriptive and casual comparative research designs to address issues related to the determinants of capital adequacy ratio. Descriptive research design is applied to identify the factors influencing capital adequacy ratio and gather sufficient information on these determinants. Additionally, the study relies on both descriptive and casual comparative research designs to explore the direction and magnitude of correlations among the dependent variable and the independent variables.

3.2 Population and Sample

Sampling is done by random sampling. Sample is selected under random basis. Similarly, financial statements of three commercial banks for ten years research period i. e. FY 2014 to FY 2023 has been taken as sample for the same purpose.

Table 2

Sample of the Bank

S.N.	Commercial Banks	Sample	Owner status
1.	Everest Bank Limited	1	Joint venture With Punjab National Bank Of India
2.	Kumari Bank Limited	1	Private and Public Sectors
3.	Nepal Bank Limited	1	Government and Public Own
	Total	3	

As of mid-July 2023, Nepal has a total of 20 commercial banks. This study focuses on three specific banks, each with distinct characteristics. Everest Bank Limited operates as a joint venture with Punjab National Bank of India, Kumari Bank represents private-public ownership, and Nepal Bank Limited operates under government ownership.

3.3 Nature and Sources of Data

In this section, the author elucidates the characteristics and sources of the data employed in the study. Data are categorized into two main types: primary and secondary. Primary data originates directly from the research process, while secondary data is gathered from existing sources. These sources vary and can be broadly categorized as published or unpublished. Published sources encompass articles from researchers, annual reports, newspapers, tax reports, and government policies. Unpublished sources consist of internal organizational documents such as meeting minutes, vouchers, and records of management and board of director decisions.

3.4 Instrument of Data Collection

The term "instrument" refers to the means utilized to gather data. Secondary data were obtained from the official websites and annual reports of the respective banks. Additionally, references were made to economic reports from the Nepal Rastra Bank (Banking and Financial Statistics) and other published statistical data. Supplementary information was acquired through informal discussions and procedures. Primary data, however, were collected using diverse instruments including questionnaires, observations, interviews, laboratory experiments, quasi-experiments, and the utilization of scales.

3.5 Methods of Analysis

For the achievement of the objectives of the study various financial and statistical tools / methods have been used. They are namely following.

3.5.1 Financial Analysis

1 Return on Assets
2 Return on Equity
3 Liquidity Risk
4 Credit Risk
5 Deposit to Assets Ratio
6 Loan to Assets
7 Leverage Ratio
8 Capital Adequacy Ratio

Capital Adequacy Ratio

The Capital Adequacy Ratio (CAR) stands as a fundamental metric for evaluating the financial robustness and resilience of commercial banks. It serves as a crucial gauge of a bank's capacity to absorb potential losses and endure unfavorable economic circumstances while continuing operations smoothly. Calculated as the ratio of a bank's capital to its risk-weighted assets, usually represented as a percentage, CAR is subject to regulatory standards mandating minimum requirements to ensure that banks uphold adequate capital reserves relative to their risk exposure. Capital, comprising both Tier 1 and Tier 2 components, serves as a protective barrier against unforeseen losses, with Tier 1 capital primarily composed of common equity and retained earnings.

$$\text{Capital Adequacy Ratio} = \frac{\text{Equity Capital}}{\text{Total Assets}}$$

Return on Assets

Return on Assets (ROA) serves as a fundamental financial indicator grounded in the principles of profitability and asset utilization efficiency. At its essence, ROA delineates a company's capacity to generate earnings relative to its total asset base, offering valuable insights into operational efficiency and managerial effectiveness. This metric holds significance stemming from core tenets in finance and accounting. Firstly, ROA embodies the fundamental notion of profitability by elucidating the correlation between a company's earnings and the resources it employs. Through the division of net income by average total assets, ROA quantifies the return yielded per unit of asset investment, furnishing a standardized metric of profitability conducive to comparative analysis across diverse companies and sectors.

$$\text{Return on Assets} = \frac{\text{Net profit after Tax}}{Total\ Assets}$$

Return on Equity

Return on Equity (ROE) stands as a pivotal financial measure encapsulating fundamental principles of profitability, efficiency, and shareholder value enhancement. Firmly grounded in financial theory, ROE serves as a vital gauge of a company's capacity to deliver returns to its shareholders in proportion to their equity stake. Fundamentally, ROE illustrates the correlation between a company's net income and the equity invested by its shareholders, providing valuable insights into both profitability and the effective utilization of capital.

$$\text{Return on Equity} = \frac{\text{Net profit after Tax}}{\text{Equity}}$$

Liquidity Risk

Managing liquidity risk is crucial for financial institutions and markets, as it involves the potential inability to fulfill short-term obligations due to a shortage of easily accessible funds. This risk arises from discrepancies between the maturity and liquidity features of a firm's assets and liabilities. It can take different forms, such as funding liquidity risk, which refers to the challenge of securing adequate funding to meet commitments, and market liquidity risk, which entails difficulty in trading assets without affecting their prices substantially. One key cause of liquidity risk is the mismatch between the maturity and liquidity profiles of assets and liabilities.

$$\text{Liquidity risk} = \frac{Total\ Loan}{Total\ Deposit}$$

Credit Risk

Credit risk poses a notable challenge in the financial sector, involving the risk of borrowers failing to fulfill their obligations, leading to losses for lenders or investors. It constitutes a fundamental element of lending and investment endeavors, exposing financial institutions and investors to the possibility of non-repayment or deterioration in the creditworthiness of borrowers. Credit risk emanates from diverse origins, including loans, bonds, derivatives, and other financial products, and can significantly impact both financial stability and profitability.

$$\text{Credit Risk} = \frac{Non{-}performing\ LOan}{Total\ Loan}$$

Deposit to Assets Ratio

The Deposit to Assets Ratio serves as a crucial financial measure for assessing the funding composition and liquidity status of financial entities, notably banks. It gauges the percentage of a bank's overall assets that are financed through customer deposits, offering valuable perspectives on the dependence on deposit-based funding for liquidity and resilience. Computed by dividing total deposits by total assets, this ratio is expressed as a percentage and functions as a significant gauge of the bank's capacity to fulfill its short-term commitments and navigate liquidity challenges.

Deposit to Assets Ratio $=\frac{Total\ Deposit}{Total\ Assets}$

Loan to Assets

The Loan to Assets ratio is a financial metric used to assess the extent to which a company's assets are financed through loans. It provides valuable insights into the company's reliance on deposit financing to support its operations, investments, and growth initiatives. The Loan to Assets ratio is calculated by dividing the total outstanding loans or borrowings by the total assets of the company, typically expressed as a percentage.

Loan to Assets$=\frac{Total\ Loan}{Total\ Assets}$

3.5.2 Statistical Analysis

Descriptive Analysis

Descriptive analysis involves examining the mean, standard deviation, minimum, and maximum values of the provided data variables.

Arithmetic Mean

The arithmetic mean, also known as the average, is computed by adding up all the values in a dataset and dividing the sum by the number of observations. This statistical measure is considered a representation of central tendency and is applied in this research to analyze data concerning sample banks across ten fiscal years. It is calculated as;

Mean $(\overline{X}) = \frac{\sum X}{n}$

Where, $\overline{X}$ = Mean

$\sum X$ = Sum of all the variable X

n = Variable involved

Standard Deviation (σ):

Standard deviation, a statistical metric, gauges the extent of variability or spread within a dataset. Computed as the square root of the variance, it involves assessing the deviation of each data point from the mean. It is denoted by (**σ**).

Standard Deviation ($\boldsymbol{\sigma}$) = $\sqrt{\frac{\sum(X - \overline{X})^2}{N}}$

Where,

X=variables

$\overline{X}$ = mean

N= No. of Period

Minimum

The minimum value, denoting the smallest numerical entry within a dataset, is also commonly known as the lowest or smallest data point within the variable being analyzed. It signifies the earliest recorded value when the dataset is sorted in ascending order. Although the minimum value might occur more than once in the dataset, each occurrence is regarded as distinct, as one instance must be smaller than the others in cases of repetition.

Maximum

The maximum value, indicating the greatest numerical entry within a given dataset, is also commonly referred to as the largest or highest data point associated with the variable being analyzed. It signifies the ultimate recorded value when the dataset is sorted in ascending order. Even if it appears multiple times in the dataset, the maximum value is regarded as unique, as one occurrence must be greater than the others in cases of repetition.

Correlation Analysis

Correlation serves as a statistical tool utilized to ascertain both the strength and direction of the connection between two distinct sets of variables. It elucidates the extent to which these variables co-vary and quantifies the magnitude of their association. The Pearson correlation coefficient is often employed to elucidate this relationship, with its values spanning from -1 to +1. A correlation coefficient of precisely -1 denotes a flawless negative correlation, indicating that the variables move diametrically opposite to each other. Conversely, a correlation coefficient of +1 signifies a flawless positive correlation, suggesting a perfect alignment between the variables in the same direction.

Multiple Regression Model

Multiple regression analysis is a statistical technique used to investigate the relationship between a single dependent variable, also known as the criterion variable, and several independent variables, or predictors. The main objective of multiple regression analysis is to predict changes in the dependent variable based on changes in the independent variables. This approach assesses the predictive power of multiple regression in forecasting outcomes. The coefficient of multiple determination, commonly referred to as R-squared, represents the proportion of variance in the dependent variable that can be explained by the regression equation. The multiple regression equation for this study can be expressed as follows:

Model

$$CAR = \beta_0+\beta_1\times ROA+\beta_2\times ROE+ \beta_3\times LR+ \beta_4\times CR+ \beta_5\times DAR+ \beta_6\times LA+ \beta_7\times GDP +e$$

Where,

ROA= Return on Assets

ROE= Return on Equity

LR= Liquidity Risk

CR= Credit Risk

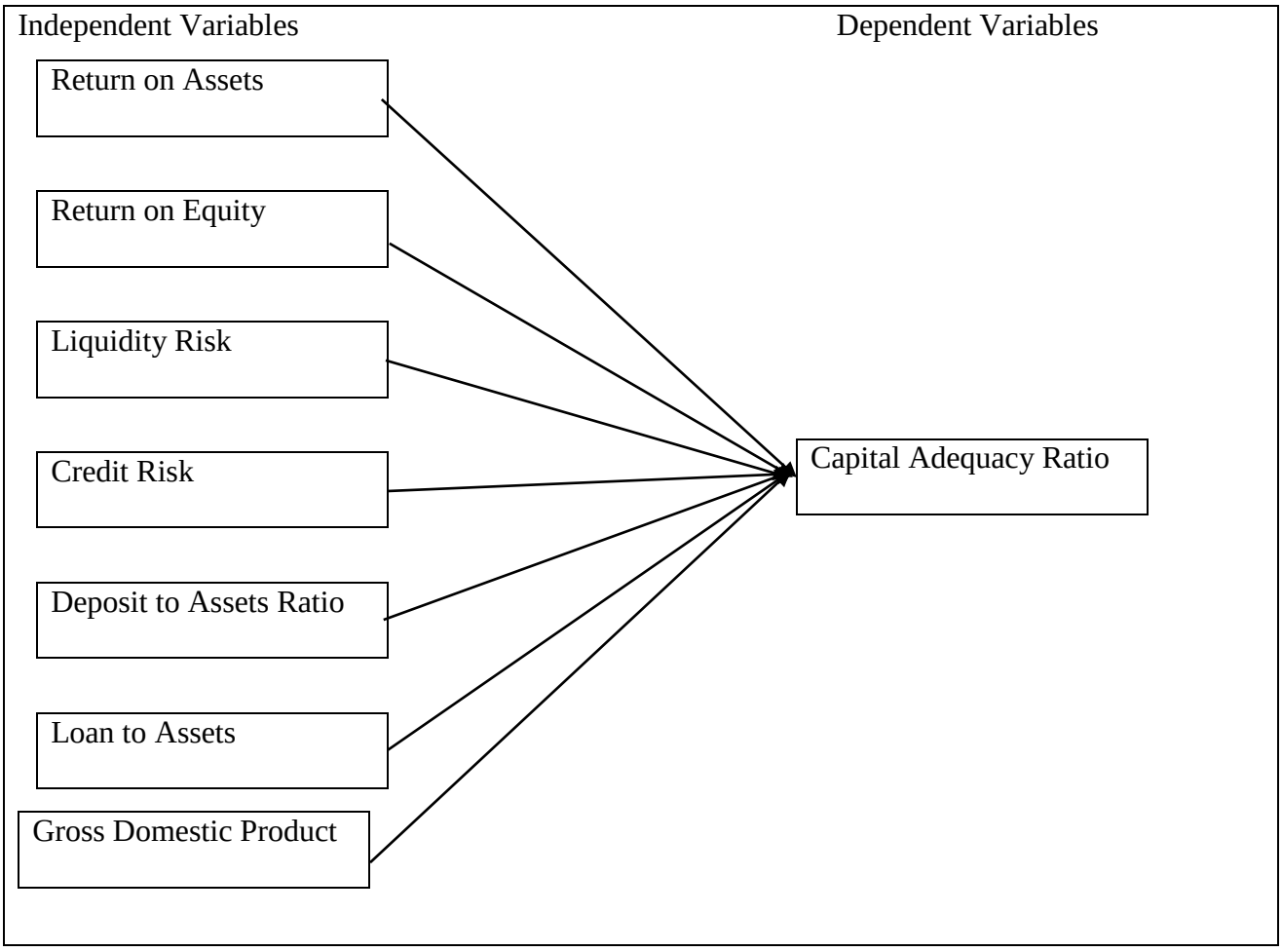
DAR= Deposit to Assets Ratio

LA= Loan to Assets

CAR=Capital Adequacy Ratio

GDP= Gross Domestic Product

3.6 Research Framework



Source: *Billel, (2023) & Mekonnen, (2015)*

Figure1: *Research Framework*

3.7 Definition of Variables

Capital Adequacy Ratio

The Capital Adequacy Ratio (CAR) is a crucial metric for evaluating the financial robustness and resilience of commercial banks. It serves as a vital gauge of a bank's capacity to absorb potential losses and endure adverse economic circumstances while sustaining its operations effectively. CAR is computed by dividing a bank's capital by its risk-weighted assets, typically represented as a percentage. Regulatory bodies enforce minimum CAR thresholds to ensure that banks maintain adequate capital reserves relative to their risk exposure. Capital, which encompasses Tier 1 and Tier 2 capital, serves as a safeguard against unforeseen losses, with Tier 1 capital primarily comprising common equity and retained earnings.

Return on Assets

Return on Assets (ROA) is a fundamental financial measure deeply rooted in the principles of profitability and asset efficiency. Essentially, ROA gauges a company's capability to generate profits in relation to its total assets, thereby shedding light on the efficacy of its operational and managerial practices. This metric holds significant importance in finance and accounting for several reasons. Firstly, ROA encapsulates the essence of profitability by illustrating the correlation between a company's earnings and the resources it utilizes. Through the division of net income by average total assets, ROA delineates the return yielded from each unit of asset investment, providing a standardized metric for profitability that enables comparisons across diverse companies and industries.

Return on Equity

Return on Equity (ROE) stands as a vital financial measure encapsulating core principles of profitability, efficiency, and the creation of shareholder value. Grounded in financial theory, ROE serves as a pivotal gauge of a company's capacity to deliver returns to its shareholders in proportion to their equity investment. Essentially, ROE delineates the correlation between a company's net income and the equity invested by its shareholders, providing valuable insights into both profitability and the effective utilization of capital.

Liquidity Risk

Liquidity risk is a critical aspect in the oversight of financial institutions and markets, involving the potential inability to fulfill short-term obligations due to a scarcity of readily accessible funds. This risk stems from the disparity between a firm's assets and liabilities concerning their maturity and liquidity attributes. Liquidity risk may materialize in various ways, including funding liquidity risk, which relates to the incapacity to secure essential funding to meet obligations, and market liquidity risk, which entails challenges in trading assets without causing substantial price fluctuations. One primary contributor to liquidity risk is the mismatch between the maturity and liquidity profiles of assets and liabilities.

Credit Risk

Credit risk poses a notable challenge in the financial sector, covering the risk of borrowers failing to fulfill their obligations, leading to financial losses for lenders or investors. It constitutes a core element of lending and investment undertakings, as financial institutions and

investors face exposure to the possibility of defaults or a decline in the creditworthiness of borrowers. Credit risk emanates from diverse origins, encompassing loans, bonds, derivatives, and other financial instruments, and can exert significant impacts on both financial stability and profitability.

Deposit to Assets Ratio

The Deposit to Assets Ratio serves as a vital financial measure for assessing the funding framework and liquidity status of financial entities, primarily banks. It gauges the percentage of a bank's overall assets financed by customer deposits, thereby offering valuable insights into the dependence on deposit-based funding for liquidity and stability. This ratio is computed by dividing total deposits by total assets and is expressed as a percentage, playing a crucial role in indicating the bank's capability to fulfill its immediate obligations and effectively navigate liquidity risks.

Loan to Assets

The Loan to Assets ratio is a financial indicator utilized to evaluate the degree to which a company's assets are funded by loans. This metric offers valuable insights into the company's dependency on deposit financing to sustain its activities, investments, and expansion endeavors. Computed by dividing the total outstanding loans or borrowings by the total assets of the company, this ratio is usually represented as a percentage.

CHAPTER-IV

RESULT AND DISCUSSION

The significance of the outcome and data discussion section in research cannot be overstated. This segment involves the conversion of numerical data into a coherent analysis, structured through tabulation, and articulated in an understandable manner using diverse tables, figures, and references. Initially, the results section entails the presentation and analysis of various financial ratios, along with their mean and standard deviation. Furthermore, correlation and multiple regression analyses are conducted to supplement the results.

Subsequently, the discussion segment offers an interpretation of the findings in light of the research objectives. It includes a comparative analysis with findings from other researchers, providing a holistic understanding of the results and their implications. This section plays a pivotal role in elucidating the significance and consequences of the research outcomes.

4.1 Result

4.1.1 Descriptive Statistics Analysis

This section provides a detailed overview of the descriptive statistics pertaining to all variables examined in the study, accompanied by a comprehensive discussion. Through this analysis, the strengths and weaknesses of the companies are elucidated, enabling a thorough evaluation of their comparative performance. Strong organizations typically enjoy a competitive advantage over weaker counterparts, highlighting the importance of this assessment for strategic planning purposes. Additionally, the mean, minimum, maximum, and standard deviation of various ratios utilized to assess the financial position are determined, offering valuable insights into the overall financial landscape.

Table 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Capital Adequacy Ratio	30	6.45	14.18	10.29	1.8
Return on Assets	30	.14	3.53	1.49	.66
Return on Equity	30	1.46	38.75	15.06	7.46
Liquidity Risk	30	50.05	104.75	82.05	12.20
Credit Risk	30	.12	5.43	1.89	1.47
Deposit to Assets Ratio	30	55.94	90.84	77.19	9.72
Loan to Assets	30	42.94	78.45	63.15	11.30
Gross Domestic Product	30	2273.00	4610.00	3251.6	730.49
Valid N (list wise)	30				

Source: *Appendix-3*

Table 3 shows the descriptive statistics of 3 banks having 30 observations. Here maximum, minimum, mean and Standard Deviation is calculated. The Capital Adequacy Ratio has 6.45, 14.18, 10.29 and 1.8 respectively of minimum, maximum, mean and Standard Deviation. The Return on Assets has 0.14, 3.53, 1.49 and 0.66 respectively of minimum, maximum, mean and Standard Deviation. The Return on Equity has 1.46, 38.75, 15.06 and 7.46 respectively of minimum, maximum, mean and Standard Deviation. The Liquidity Risk has 50.05, 104.75, 82.05 and 12.20 respectively of minimum, maximum, mean and Standard Deviation. The Credit Risk has 0.12, 5.43, 1.89 and 1.47 respectively of minimum, maximum, mean and Standard Deviation. The Deposit to Assets Ratio has 55.94, 90.84, 77.19 and 9.72 respectively of minimum, maximum, mean and Standard Deviation. The Loan to Assets has 42.94, 78.45, 63.15 and 11.30 respectively of minimum, maximum, mean and Standard Deviation. The Loan to Assets has 2273.00, 4610.00, 3251.6 and 730.49 respectively of minimum, maximum, mean and Standard Deviation. The different between the mean and maximum, minimum and maximum, mean and minimum is higher, the standard deviation is also higher so the all the dependent and independent variables current situation is fluctuating in nature.

4.1.2 Correlation Analysis

The Pearson correlation coefficient serves as a statistical instrument for evaluating the correlation between two sets of variables, elucidating both the direction and magnitude of their relationship. This coefficient, ranging from -1 to +1, offers valuable insights into the degree of

association between the variables under scrutiny. A correlation coefficient of -1 denotes a perfect negative correlation, indicating that the variables move inversely with each other. Conversely, a correlation coefficient of +1 signifies a perfect positive correlation, implying a direct relationship between the variables.

Table 4

Correlation Analysis

		Capital Adequacy Ratio	Return on Assets	Return on Equity	Liquidity Risk	Credit Risk	Deposit to Assets Ratio	Loan to Assets	Gross Domestic Product
Capital Adequacy Ratio	Pearson Correlation	1							
	Sig. (2-tailed)								
	N	30							
Return on Assets	Pearson Correlation	-.049	1						
	Sig. (2-tailed)	.796							
	N	30	30						
Return on Equity	Pearson Correlation	-.419*	.912**	1					
	Sig. (2-tailed)	.021	.000						
	N	30	30	30					
Liquidity Risk	Pearson Correlation	.592**	-.312	-.490**	1				
	Sig. (2-tailed)	.001	.093	.006					
	N	30	30	30	30				
Credit Risk	Pearson Correlation	-.091	.012	.002	-.481**	1			
	Sig. (2-tailed)	.632	.949	.991	.007				
	N	30	30	30	30	30			
Deposit to Assets Ratio	Pearson Correlation	-.367*	-.393*	-.172	-.160	-.027	1		
	Sig. (2-tailed)	.046	.032	.365	.400	.888			
	N	30	30	30	30	30	30		
Loan to Assets	Pearson Correlation	.247	-.521**	-.521**	.729**	-.419*	.556**	1	
	Sig. (2-tailed)	.189	.003	.003	.000	.021	.001		
	N	30	30	30	30	30	30	30	
Gross Domestic Product	Pearson Correlation	.504**	-.368*	-.551**	.521**	-.176	-.215	.301	1
	Sig. (2-tailed)	.004	.045	.002	.003	.352	.253	.107	
	N	30	30	30	30	30	30	30	30

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

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

Source: *Appendix-3*

Table 4 show the correlation of the different variables. The variable is independent variable and they are Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to

Assets Ratio, Loan to Assets and Gross Domestic Product and dependent variable Capital Adequacy Ratio. Here correlation is calculated for 30 observations of different three banks.

The relationship between return on assets and capital adequacy ratio is negative and not significant so the hypothesis is not true. The correlation value negative 0.049 and the significant value is 0.796 which is more than 0.05 so the relationship is not significant and the relationship is called not significant.

The relationship between return on equity and capital adequacy ratio is negative and significant so the hypothesis is true. The correlation value negative 0.419 and the significant value is 0.021which is less than 0.05 so the relationship is significant and the relationship is called 5% level of significant.

The relationship between Liquidity Risk and capital adequacy ratio is positive and significant so the hypothesis is true. The correlation value positive 0.592 and the significant value is 0.001 which is less than 0.01 so the relationship is significant and the relationship is called 1% level of significant.

The relationship between Credit Risk and capital adequacy ratio is negative and not significant so the hypothesis is not true. The correlation value negative 0.091 and the significant value is 0.732 which is more than 0.05 so the relationship is not significant and the relationship is called not significant.

The relationship between Deposit to Assets Ratio and capital adequacy ratio is negative and significant so the hypothesis is true. The correlation value negative 0.367 and the significant value is 0.046 which is less than 0.05 so the relationship is significant and the relationship is called 5% level of significant.

The relationship between Loan to Assets and capital adequacy ratio is positive and not significant so the hypothesis is not true. The correlation value positive 0.247 and the significant value is 0.189 which is more than 0.05 so the relationship is not significant and the relationship is called not significant.

The relationship between Gross Domestic Product and capital adequacy ratio is positive and significant so the hypothesis is true. The correlation value positive 0.504 and the significant

value is 0.004 which is less than 0.01 so the relationship is significant and the relationship is called 1% level of significant.

4.1.3 Regression Analysis

Multiple regression analysis aims to predict changes in the dependent variable by considering variations in the independent variables. It assesses the effectiveness of multiple regressions as predictive tools. Moreover, the multiple determination represents the proportion of variability in the dependent variable that can be explained by the regression equation.

Table 5

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928[a]	.861	.817	.775

a. Predictors: (Constant), Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, Loan to Assets

Source: *Appendix-3*

Table 5 show the model summary of the 30 observation of three banks of different 10 each of banks observation. The adjusted R-square stands at 0.817, serving as an indicator of the model's goodness of fit. Collectively, variations in the independent variables, namely Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, and Loan to Assets, contribute to 81.7% of the variation observed in the dependent variable, which is capital adequacy. The remaining 18.3% of the variation is influenced by other variables. With a standard error of 0.775, characterized as moderate, it implies a moderate level of accuracy in the calculated results.

Table 6

ANOVA of Bank

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.208	7	11.744	19.526	.000[b]
	Residual	13.232	22	.601		
	Total	95.439	29			

a. Dependent Variable: Capital Adequacy Ratio

b. Predictors: (Constant), Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, Loan to Assets

Source: *Appendix-3*

Table 6 is the ANOVA of the three commercial banks of Nepal. Here is the 10 observations of each bank in total 30 observations. The dependent variable is Capital Adequacy Ratio and independent variables called predictor are Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, and Loan to Assets. The regression value is significant because significant value is less than 5% i. e. 0.000.

Table 7

Coefficient of Banks

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.998	13.492		.222	.826
	Return on Assets	5.355	.714	1.954	7.496	.000
	Return on Equity	-.513	.069	-2.112	-7.438	.000
	Liquidity Risk	.078	.156	.527	.503	.620
	Credit Risk	-.035	.125	-.029	-.282	.781
	Deposit to Assets Ratio	.066	.164	.353	.402	.692
	Loan to Assets	-.068	.198	-.424	-.344	.734
	Gross Domestic Product	-3.92	.000	-.016	-.138	.891

a. Dependent Variable: Capital Adequacy Ratio

Source: *Appendix-3*

Table 7 shows the coefficient of banks. The coefficient is calculated different three banks each of ten observations and in total of 30 observations. The dependent variable is Capital Adequacy Ratio and independent variables called predictor are Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, and Loan to Assets. Here coefficient table shows the individual variable variation to the dependent variable, their accuracy and significant level.

The impact of return on assets to the capital adequacy ratio is positive and significant so the hypothesis is true. The positive value is shown by beta value 5.355 which represent the 1% change in to the return on assets than the capital adequacy is change positively by 5.355%. The calculated value is accurate because the standard error is low i.e. 0.714. The impact is significant because the significant value is 0.000 which is less than 0.05.

The impact of Return on Equity to the capital adequacy ratio is negative and significant so the hypothesis is true. The negative value is shown by beta value 0.513 which represent the 1% change in to the Return on Equity than the capital adequacy is change negatively by 0.513%. The calculated value is accurate because the standard error is low i.e. 0.069. The impact is significant because the significant value is 0.000 which is less than 0.05.

The impact of Liquidity Risk to the capital adequacy ratio is positive and not significant so the hypothesis is not true. The positive value is shown by beta value 0.078 which represent the 1% change in to the Liquidity Risk than the capital adequacy is change positively by 0.078%. The calculated value is accurate because the standard error is low i.e. 0.156. The impact is not significant because the significant value is 0.62 which is more than 0.05.

The impact of Credit Risk to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The negative value is shown by beta value 0.035 which represent the 1% change in to the Credit Risk than the capital adequacy is change negatively by 0.035%. The calculated value is accurate because the standard error is low i.e. 0.125. The impact is not significant because the significant value is 0.781which is more than 0.05.

The impact of Deposit to Assets Ratio to the capital adequacy ratio is positive and not significant so the hypothesis is not true. The positive value is shown by beta value 0.066 which represent the 1% change in to the Deposit to Assets Ratio than the capital adequacy is change

positively by 0.066%. The calculated value is accurate because the standard error is low i.e. 0.164. The impact is not significant because the significant value is 0.692 which is more than 0.05.

The impact of Loan to Assets to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The negative value is shown by beta value 0.068 which represent the 1% change in to the Loan to Assets than the capital adequacy is change negatively by 0.068%. The calculated value is accurate because the standard error is low i.e. 0.198. The impact is not significant because the significant value is 0.734 which is more than 0.05.

The impact of Gross Domestic Product to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The negative value is shown by beta value 3.92 which represent the 1% change in to the Gross Domestic Product than the capital adequacy is change negatively by 3.92%. The calculated value is accurate because the standard error is low i.e. 0.000. The impact is not significant because the significant value is 0.891which is more than 0.05.

4.2 Discussion

The first objective of research is to explore the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the different between the mean and maximum, minimum and maximum, mean and minimum is higher. The standard deviation is also higher so the all the dependent and independent variables current situation is fluctuating in nature. The result is consistent with the result of Abba, Okwa, Soje & Aikpitanyi, (2018) and the result is also consistent with the result of Shrestha, (2023).

The second objective of research is to analyze the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the relationship between return on equity and capital adequacy ratio is negative and significant so the hypothesis is true. The result is consistent with the result of Alfadli & Djalila, (2022). The relationship between Liquidity Risk and capital adequacy ratio is positive and

significant so the hypothesis is true. The result is consistent with the result of Tran & Pham, (2022). The relationship between Credit Risk and capital adequacy ratio is negative and not significant so the hypothesis is not true. The result is consistent with the result of Keqa, (2021). The relationship between Deposit to Assets Ratio and capital adequacy ratio is negative and significant so the hypothesis is true. The result is consistent with the result of Setiawan & Muchtar, (2021). The relationship between Loan to Assets and capital adequacy ratio is positive and not significant so the hypothesis is not true. The result is consistent with the result of AlZoubi, (2021). The relationship between Gross Domestic Product and capital adequacy ratio is positive and significant so the hypothesis is true. The result is consistent with the result of Vu & Dang, (2020).

The third objective of research is to examine the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the impact of return on assets to the capital adequacy ratio is positive and significant so the hypothesis is true. The result is consistent with the result of Sunaryo, Santoni, Endri & Harahap, (2020). The impact of Return on Equity to the capital adequacy ratio is negative and significant so the hypothesis is true. The result is consistent with the result of El-Ansary, El-Masry & Yousery, (2019). The impact of Liquidity Risk to the capital adequacy ratio is positive and not significant so the hypothesis is not true. The result is consistent with the result of Sudiyatno, Puspitasari, Susilowati, Sudarsi & Udin, (2019). The impact of Credit Risk to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The result is consistent with the result of Abba, Okwa, Soje & Aikpitanyi, (2018). The impact of Loan to Assets to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The result is consistent with the result of Pokhrel, (2018). The impact of Gross Domestic Product to the capital adequacy ratio is negative and not significant so the hypothesis is not true. The result is consistent with the result of Subedi, (2018).

CHAPTER-V

SUMMARY AND CONCLUSION

This chapter included the summary, conclusion and implication three section included. The summary is the detail from the beginning to ending. The conclusion describes in short finding of the research. The implication of the research is the third part and describe the future uses of the research work.

5.1 Summary

A commercial bank is a financial institution offering a variety of services to individuals, businesses, and governments, including deposit acceptance, lending, credit card issuance, money transfers, and investment products. These banks are vital to the economy as they mediate between depositors and borrowers, facilitating the flow of funds through loans and investments. Capital, in this context, refers to a bank's core capital, including common equity, preferred stock, and reserves. Risk-weighted assets measure a bank's assets adjusted for the associated risk level, with certain assets carrying higher risk weights than others. The Capital Adequacy Ratio (CAR) of a bank is influenced by various factors that determine its financial resilience and compliance with regulations. Regulatory requirements, often based on international standards like the Basel Accords, establish minimum CAR thresholds to assess a bank's capital adequacy relative to its risk exposure. Additionally, the composition of a bank's assets, especially their risk levels, directly affects its CAR. On the basis of the given background the study is conducted on “determinants of capital adequacy ratio of Nepalese commercial banks”.

The problem of the research are What are the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal? Is there any relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal? Whether there is any impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal? the problem are solve by determining the some objectives they are to explore the current status of

the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal, to analyze the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal and to examine the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. The descriptive and casual comparative research has been used for the analysis of the research. The secondary data are collected from the annual report of the bank. The descriptive statistics, correlation and regression analysis conducted for the research objective achieve. It is found that the different between the mean and maximum, minimum and maximum, mean and minimum is higher, the standard deviation is also higher so the all the dependent and independent variables current situation is fluctuating in nature. The relationship of return on assets, credit risk and loan to assets ratio is not significant to the capital adequacy ratio. The return on equity, liquidity risk, deposit to assets ratio and gross domestic product is significant relationship to the capital adequacy ratio. The impact of Return on Assets and Return on Equity is significant to the capital adequacy ratio. The impact of Liquidity Risk, Credit Risk, Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product have not significant impact to the capital adequacy ratio.

5.2 Conclusion

The first objective of research is to explore the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the different between the mean and maximum, minimum and maximum, mean and minimum is higher. The standard deviation is also higher so the all the dependent and independent variables current situation is fluctuating in nature. In conclusion the current status of the Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets, Gross Domestic Product and Capital Adequacy Ratio of the commercial bank in Nepal are fluctuating in nature.

The second objective of research is to analyze the relationship of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the relationship of return on assets, credit risk and loan to assets ratio is not significant to the capital adequacy ratio. The return on equity, liquidity risk, and deposit to assets ratio and gross domestic product is significant relationship to the capital adequacy ratio. In conclusion the return on equity, liquidity risk, and deposit to assets ratio and gross domestic product is significant relationship to the capital adequacy ratio.

The third objective of research is to examine the impact of Return on Assets, Return on Equity, Liquidity Risk, Credit Risk, and Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product to the Capital Adequacy Ratio of the commercial bank in Nepal. It is found that the impact of Return on Assets and Return on Equity is significant to the capital adequacy ratio. The impact of Liquidity Risk, Credit Risk, Deposit to Assets Ratio, Loan to Assets and Gross Domestic Product have not significant impact to the capital adequacy ratio. In conclusion the impact of Return on Assets and Return on Equity is significant to the capital adequacy ratio.

5.3 Implications

Research on the determinants of the Capital Adequacy Ratio (CAR) of commercial banks in Nepal can have several implications for both academia and the banking industry. Here are some potential research implications:

Understanding the factors influencing CAR can help policymakers formulate better regulatory frameworks. For instance, if the research finds that certain macroeconomic indicators significantly impact CAR, policymakers can adjust monetary or fiscal policies accordingly to ensure the stability of the banking sector.

Identifying the determinants of CAR can assist commercial banks in Nepal in refining their risk management strategies. Banks can use this information to allocate capital more efficiently, thereby reducing their exposure to risks and enhancing their resilience to adverse economic conditions.

Research findings can guide commercial banks in optimizing their capital allocation decisions. Banks may reevaluate their lending practices, investment portfolios, and other activities in light of the factors influencing CAR to maintain adequate capital levels while maximizing profitability.

Insights into the determinants of CAR can enhance investor confidence in the Nepalese banking sector. Investors may use this information to assess the financial health and stability of individual banks, thereby making more informed investment decisions.

Commercial banks that understand the drivers of CAR better than their competitors can leverage this knowledge to gain a competitive advantage. They can tailor their business strategies to maintain higher capital adequacy levels while potentially attracting more customers and investors.

Research in this area can contribute to the academic literature on banking and finance, particularly in emerging markets like Nepal. Scholars can build upon existing theories and methodologies to deepen their understanding of capital adequacy determinants and their implications for financial stability.

Identifying the determinants of CAR in Nepal may raise new research questions and avenues for future inquiry. Researchers can explore additional variables, employ different analytical techniques, or investigate the impact of regulatory changes on capital adequacy dynamics to further enrich the literature in this field.

Research findings can be used to enhance the capacity of banking professionals, regulators, and policymakers in Nepal. Workshops, seminars, and training programs can be organized to disseminate knowledge about capital adequacy and its determinants, ultimately strengthening the overall financial infrastructure of the country.

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APPENDIX

Appendix 1: Data from annual Report

1. Nepal Bank Limited Rs in Million

Year	Total Loan (RS)	Total deposit (RS)	Total Assets (RS)	Total Equity (RS)	Profit after tax (RS)	Non-performing loan (RS)	GDP of Nepal ($)
2023	184055	244513	296736	36522	3437	5309	4610
2022	177630	196076	250077	35453	2923	3313	4083
2021	141,958	162813	291066	33858	4572	1608	3692
2020	106,824	141530	237680	25855	3575	2696	3343
2019	95,724	117200	201138	23188	4611	2365	3419
2018	78,295	99540	169076	20586	4930	2015	3311
2017	73,185	93944	140697	14173	3268	2469	2897
2016	61,250	89410	127619	11638	4510	2469	2452
2015	50,970	89410	118695	9518	1369	1978	2436
2014	39,035	77998	90292	7670	1076	2121	2273

2. Everest Bank Ltd Rs in Million

Date	Total Loan	Total deposit	Total Assets	Total Equity	Net Profit	Non-performing loan
2023	167555	198007	250090	25371	3362	1331
2022	155053	172739	225211	22561	2429	183
2021	135,173	160220	211650	20,683	1770	786
2020	119,068	143545	158023	18,637	2,516	1254
2019	112,006	129568	170077	17,625	3,054	1123
2018	94,179	115511	144818	16,134	2,581	456
2017	77287	95094	116510	11,543	2,118	197
2016	67955	93735	113885	7348	1730	264
2015	54482	83093	99167	6889	1574	367
2014	47572	62108	70445	5456	1549	470

3. Kumari Bank Ltd Rs in Million

Date	Total Loan	Total deposit	Total Assets	Total Equity	Net Profit	Non-performing loan
2023	280691	316047	380524	35313	517	14,362
2022	158409	176767	213155	21001	2579	1693
2021	143020	145838	189,782	18,892	1970	1380
2020	114513	116547	145,971	17,268	1158	1600
2019	76052	73201	105311	11,719	1230	770
2018	62374	59546	82723	10,539	1046	660
2017	44696	47691	61416	8,263	660	840
2016	29853	37950	42416	4032	716	345
2015	26246	33421	37374	3347	394	673
2014	21898	27578	31020	2965	341	918

Appendix 2: Different financial ratios

CAR	ROA	ROE	LR	CR	DAR	LA	Year
12.30791	1.158269	9.410766	75.27412	2.884464	82.40085	62.02652	2023
14.17683	1.16884	8.244718	90.59242	1.865113	78.40625	71.03012	2022
11.63241	1.570778	13.50346	87.19083	1.132729	55.9368	48.77176	2021
10.87807	1.504123	13.82711	75.47799	2.523777	59.54645	44.94446	2020
11.5284	2.292456	19.88529	81.67577	2.470645	58.26845	47.59121	2019
12.17559	2.915848	23.94831	78.65682	2.5736	58.87293	46.30758	2018
10.07342	2.322722	23.05793	77.90279	3.373642	66.77044	52.01603	2017
9.119332	3.533957	38.75236	68.50464	4.03102	70.0601	47.99442	2016
8.018872	1.153376	14.38327	57.00705	3.880714	75.32752	42.94199	2015
8.494662	1.191689	14.02868	50.04616	5.433585	86.38418	43.23196	2014
10.14475	1.344316	13.25135	84.62075	0.794366	79.1743	66.99788	2023
10.01772	1.078544	10.76637	89.76143	0.118024	76.70096	68.84788	2022
9.772266	0.836286	8.557753	84.36712	0.581477	75.70045	63.86629	2021
11.79385	1.592173	13.50003	82.9482	1.05318	90.83804	75.34853	2020

10.36295	1.795657	17.32766	86.44573	1.002625	76.18196	65.85605	2019
11.14088	1.782237	15.99727	81.53249	0.484184	79.76287	65.03266	2018
9.907304	1.81787	18.34878	81.27432	0.254894	81.61875	66.33508	2017
6.452123	1.519076	23.54382	72.49693	0.388492	82.30671	59.66984	2016
6.946867	1.587222	22.84802	65.5675	0.673617	83.79098	54.93965	2015
7.745049	2.198879	28.39076	76.59561	0.987976	88.16524	67.5307	2014
9.280098	0.135865	1.46405	88.81306	5.116659	83.05573	73.76434	2023
9.852455	1.209918	12.28037	89.61458	1.068752	82.92885	74.31634	2022
9.954579	1.038033	10.42769	98.06772	0.9649	76.84501	75.36015	2021
11.82975	0.793308	6.706046	98.25478	1.397221	79.84257	78.44914	2020
11.12799	1.167969	10.49578	103.8948	1.012465	69.50936	72.21658	2019
12.74011	1.264461	9.92504	104.7493	1.058133	71.9824	75.40104	2018
13.45415	1.074639	7.987414	93.71999	1.879363	77.6524	72.77582	2017
9.505847	1.688042	17.75794	78.66403	1.155663	89.47095	70.38146	2016
8.955424	1.054209	11.77174	78.53146	2.5642	89.42313	70.22529	2015
9.558349	1.099291	11.50084	79.40387	4.192164	88.90393	70.59317	2014

Appendix 3: Data from after analysis using SPSS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Capital Adequacy Ratio	30	6.45	14.18	10.2983	1.81411
Return on Assets	30	.14	3.53	1.4963	.66195
Return on Equity	30	1.46	38.75	15.0630	7.46672
Liquidity Risk	30	50.05	104.75	82.0551	12.20369
Credit Risk	30	.12	5.43	1.8973	1.47099
Deposit to Assets Ratio	30	55.94	90.84	77.1943	9.72236
Loan to Assets	30	42.94	78.45	63.1588	11.30386
Gross Domestic Product	30	2273.00	4610.00	3251.6000	730.49084
Valid N (listwise)	30				

Correlations

		Capital Adequacy Ratio	Return on Assets	Return on Equity	Liquidity Risk	Credit Risk	Deposit to Assets Ratio	Loan to Assets	Gross Domestic Product
Capital Adequacy Ratio	Pearson Correlation	1	-.049	-.419*	.592**	-.091	-.367*	.247	.504**
	Sig. (2-tailed)		.796	.021	.001	.632	.046	.189	.004
	N	30	30	30	30	30	30	30	30
Return on Assets	Pearson Correlation	-.049	1	.912**	-.312	.012	-.393*	-.521**	-.368*
	Sig. (2-tailed)	.796		.000	.093	.949	.032	.003	.045
	N	30	30	30	30	30	30	30	30
Return on Equity	Pearson Correlation	-.419*	.912**	1	-.490**	.002	-.172	-.521**	-.551**
	Sig. (2-tailed)	.021	.000		.006	.991	.365	.003	.002
	N	30	30	30	30	30	30	30	30
Liquidity Risk	Pearson Correlation	.592**	-.312	-.490**	1	-.481**	-.160	.729**	.521**
	Sig. (2-tailed)	.001	.093	.006		.007	.400	.000	.003
	N	30	30	30	30	30	30	30	30
Credit Risk	Pearson Correlation	-.091	.012	.002	-.481**	1	-.027	-.419*	-.176
	Sig. (2-tailed)	.632	.949	.991	.007		.888	.021	.352
	N	30	30	30	30	30	30	30	30
Deposit to Assets Ratio	Pearson Correlation	-.367*	-.393*	-.172	-.160	-.027	1	.556**	-.215
	Sig. (2-tailed)	.046	.032	.365	.400	.888		.001	.253
	N	30	30	30	30	30	30	30	30
Loan to Assets	Pearson Correlation	.247	-.521**	-.521**	.729**	-.419*	.556**	1	.301
	Sig. (2-tailed)	.189	.003	.003	.000	.021	.001		.107
	N	30	30	30	30	30	30	30	30
Gross Domestic Product	Pearson Correlation	.504**	-.368*	-.551**	.521**	-.176	-.215	.301	1
	Sig. (2-tailed)	.004	.045	.002	.003	.352	.253	.107	
	N	30	30	30	30	30	30	30	30

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

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928[a]	.861	.817	.77553

a. Predictors: (Constant), Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, Loan to Assets

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.208	7	11.744	19.526	.000[b]
	Residual	13.232	22	.601		
	Total	95.439	29			

a. Dependent Variable: Capital Adequacy Ratio

b. Predictors: (Constant), Gross Domestic Product, Credit Risk, Deposit to Assets Ratio, Return on Assets, Liquidity Risk, Return on Equity, Loan to Assets

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.998	13.492		.222	.826
	Return on Assets	5.355	.714	1.954	7.496	.000
	Return on Equity	-.513	.069	-2.112	-7.438	.000
	Liquidity Risk	.078	.156	.527	.503	.620
	Credit Risk	-.035	.125	-.029	-.282	.781
	Deposit to Assets Ratio	.066	.164	.353	.402	.692
	Loan to Assets	-.068	.198	-.424	-.344	.734
	Gross Domestic Product	-3.92	.000	-.016	-.138	.891

a. Dependent Variable: Capital Adequacy Ratio

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ABSTRACT The objectives of the study are explore the current status of the

Return on Assets, Return on Equity, Liquidity Risk, Credit Risk , and Debt to **Assets**