

# **THE IMPACT OF CAPITAL ADEQUACY AND OPERATING EFFICIENCY ON PERFORMANCE OF NEPALESE MANUFACTURING COMPANIES**

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial  
fulfillment of requirement 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 “**The Impact of Capital Adequacy and Operating Efficiency on Performance of Nepalese Manufacturing Companies**”. 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.

Rushma Koirala

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## REPORT OF RESEARCH COMMITTEE

Ms. Rushma Koirala has defended research proposal entitled “**The Impact of Capital Adequacy and Operating Efficiency on Performance of Nepalese Manufacturing Companies**“, 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 Pitri Raj Adhikari and submit the thesis for evaluation and viva voce examination.

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We have examined the dissertation entitled “**The Impact of Capital Adequacy and Operating Efficiency on Performance of Nepalese Manufacturing Companies**” presented by Ms. Rushma Koirala 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.

Rushma Koirala

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## **ABBREVIATIONS**

ANOVA	:	Analysis of Variance
ATR	:	Assets Turnover Ratio
BNCLB	:	Bottlers Nepal Company Limited (Balaju)
CAR	:	Capital Adequacy ratio
HDCL	:	Himalayan Distillery Company limited
NRB	:	Nepal Rastra Bank
OESR	:	Operating expenses to Revenue
ROA	:	Return on Assets
ROE	:	Return on Equity ratio
SD	:	Standard Deviation
SPSS	:	Statistical Package for the Social Sciences
TDTA	:	Total Debt to Total Assets
UNCL	:	Unilever Nepal Company limited

## ABSTRACT

The objectives of the study are to explore current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and profitability of the manufacturing company of Nepal, to analyze the relationship of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company, to examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. The research use descriptive and casual comparative research design. The descriptive research design used for objectives one and casual comparative research design for objective two and three. The secondary data with three sample of the manufacturing out of eighteen are selected as an availability of data for ten years judgmental sampling. The descriptive statistics, correlation and regression analysis is conducted for the research. The SPSS and excel are the tools for analysis of the data. The finding of the research are the manufacturing industries of Nepal are seem, the Return on Equity, Return on Assets, Capital Adequacy, Assets Turnover, Total Debt to Total Assets and Operating expenses to Revenue related variables are very much fluctuating, very high to less in the year to year or they are not in consistence. The relationship between assets turnover and return on equity, operating expenses to revenue to return on equity, capital adequacy to return on assets, total debt to total assets to return on assets, operating expenses to return on assets are significant. The capital adequacy to the return on equity, total debt to total assets to return on equity and assets turnover and return on assets is significant relationship. The impact of assets turnover to the return on equity and operating expenses to revenue to the return on equity is significant. The capital adequacy to return on equity and total debt to total assets to the return on equity is insignificant impact. The capital adequacy to the return on assets and operating expenses to revenue to the return on assets is significant impact. The asset turnover to the return on assets and total debt to total assets to the return on assets is not significant impact.

Keywords: *Capital Adequacy, Asset Turnover, Operating Expenses, Debt to Total Assets and Profitability*

# CHAPTER- I

## INTRODUCTION

### 1.1 Background of the Study

Manufacturing companies are entities that transform raw materials into market-ready goods, and the associated processes typically involve various facilities such as land, factories, machinery, transport vehicles, and additional support structures. The industry's competitiveness is influenced by the number of companies operating within it and the prevailing economic conditions, leading to intense competition among manufacturing firms. This competition serves as a driving force for each company to enhance its performance in order to achieve its objectives.

The Capital Adequacy Ratio (CAR) serves as a metric for assessing company performance. Understanding a company's CAR enables the evaluation of its overall performance. CAR also functions as a tool for appraising capital within a company, as capital holds significant importance in the context of business development. Consequently, CAR becomes a valuable appraisal tool for investment decisions, particularly for companies issuing shares. The manager of a company, recognizing the pivotal role of capital, is frequently confronted with decisions regarding meeting and sustaining capital adequacy. This is crucial for business development and to address potential losses. The capital adequacy ratio serves as an indicator of a company's ability to overcome losses, as highlighted by (Sheeba in 2017).

One of the most important goals of a corporation's leadership is to maximize the present and future financial and operational performance because they impact the market price per share and consequently, shareholders' wealth. Common business practice implies that operational efficiency (OE) plays an important role in improving current and future firm performance. In order to survive and prosper, firms have to produce their output from input efficiently. Producing more output from unchanged input, consuming less input for unchanged output, reducing operating costs without damaging the corporation, reducing the days in the cash conversion cycle, improving operating cash flows, increasing total asset turnover, and effecting reductions in operating risk are all signs of relative

Operational efficiency. Therefore, OE can be used as a proxy for competitive advantage, which affects the firm's current profitability and its future potential performance.

Operational efficiency is narrowly defined as the capacity to provide products and services cost effectively without sacrificing quality. It can also be defined as the right combination of people, process, and technology to enhance the productivity and wealth of any business operation, while driving down the cost of routine operations to a desired level (Shawk, 2008).

Profitability refers to a company's capacity to generate a profit, and it serves as an indicator of the company's ability to fulfill obligations to its stakeholders, contributing to the shaping of the company's future prospects (Dewi & Wirajaya, 2013). Evaluating a company's financial performance heavily relies on the level of profitability it achieves. Every company aspires to attain high profitability to ensure the stability of its liquidity. Moreover, consistent good profitability can attract a greater number of investors interested in investing or holding shares in the company.

Profitability ratios are metrics utilized to assess a company's ability to generate profits. These ratios also provide insights into the effectiveness of company management, as demonstrated by the profits derived from sales and investment income. A company's increasing profitability, reflected in higher ratios, signifies an enhanced ability to generate profits. Generally, the value of a company's profitability serves as a key indicator for measuring its overall performance. In this study, profitability was quantified using Return on Assets (ROA) as the metric (Sofyan, 2019).

## **1.2 Problem Statement**

A problem statement is a concise description of an issue to be addressed or a condition to be made best upon. It knows the gap between the current (problem) state and desired (goal) state of a process or product. Using the facts, the problem statement should be designed to address who, what, where, when, and why. The first condition of solving a problem understands the problem, which can be done by way of a problem statement.

Adequate capital is also the most important factor to the manufacturing sectors. If not maintain adequate factor then related problems arise, that's the reason behind so the various problems which affect the performance of the organization should be evaluated. Finding the solution or aware about the problem on various variables on performance of the manufacturing like capital adequacy related fact and the operating

efficiency related variable maintenance is the crucial factor for the success of the manufacturing company. Various problems are there for the better performance of the manufacturing. Out of them some are following. Those are studies in these researches.

- I. What is the current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and profitability of the manufacturing company of Nepal?
- II. What are the relations of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company?
- III. Whether any impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company?

### **1.3 Objectives of Study**

The main objective of research is to find out the impact of capital adequacy and operating efficiency to the profitability of the manufacturing company in Nepal. It can be further extended the following number three objectives.

- I. To examine current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio to the profitability of the manufacturing company of Nepal.
- II. To analyze the relationship of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company.
- III. To examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company.

### **1.4 Hypothesis of the Study**

The hypothesis the knowing the any impact of the research is whether that effect is significant of not. The following are the statement of the hypothesis which are tested in this research.

H1: There is the significant impact of capital adequacy to the profitability of the manufacturing company.

H2: There is the significant impact of total turnover ratio to the profitability of the manufacturing company.

H3: There is the significant impact of total debt to total assets ratio to the profitability of the manufacturing company.

H4: There is the significant impact of operating expenses to sales revenue ratio to the profitability of the manufacturing company.

### **1.5 Rationale of the Study**

Capital adequacy is the most importance to the all the organization. The adequate capital gives the organization good health. The maintenance of the capital as much as the appropriate value of the capital in the ratio of the total assets gives the financial return increasing the company. Operating efficiency is viewed as the ability of the company to reduce operating costs in attaining its objective through combination of right people, process and technology. With right combination of resources, business operation of any company will enhance productivity of services or goods offered (Shawk 2008). This is calculated by dividing operating expenses to the operating income. It's is related to the strength and weakness of the company about their operating activities. On the basis of operating related investment how much amount is earned it said the capabilities of the company about their operating activities.

This study gives the manufacturing company capital adequacy related maintain and their impact on the profitability of the banks and operating effectiveness related different factors and their impact on the profitability. The relation with this factor to the profitability is positive or negative and if relation is positive or negative any than that relation is significant or not? The research finds that from this research. That's why this research has various significant of the studies.

### **1.6 Limitations of the Study**

The study has following limitations;

- Only ten years data were used for the research.
- Data are taken from the website of the company; it means all data are secondary data for studies.
- Only three sample companies are selected for studies.
- This studies is based on historical data.

- Only capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with return on equity are variable taken under studies.
- Financial analysis is based on ratio calculation.
- Statistical tools like descriptive statistic, correlation and multiple regressions are used for data analysis.
- Excel is the tools for data presentation, different statistical calculation and analysis.

## **CHAPTER- II**

### **LITERATURE REVIEW**

#### **2.1 Theoretical Review**

##### **Capital Adequacy**

Capital stands as a crucial determinant of financial stability and the safety of banks. It functions as an indicator of a bank's capacity for expansion, maintenance, and enduring existence in a competitive and ever-expanding financial landscape by showcasing its risk tolerance. According to Usman et al. (2019), Banks that can ensure a satisfactory Capital Adequacy Ratio (CAR) exhibit resilience during financial crises, safeguarding both the bank's assets and the funds deposited by account holders. The quantity of equity capital and additional securities held by a bank to offset risky assets, acting as a safeguard against potential bank failure, is termed capital adequacy. This metric is utilized to assess whether a bank possesses sufficient capital to support the risks inherent in its balance sheet, effectively addressing concerns related to bank solvency (Agbeja et al., 2015, 91).

##### **Operational Efficiency**

Producers play a vital role as financial intermediaries for savers and borrowers in an economy. The operational efficiency of the manufacturing sector is essential for the well-functioning of the economy, as all sectors depend on it for their survival and growth. Operational efficiency is defined as the ability to deliver products and services cost-effectively without compromising quality. Shawk (2008) describes operational efficiency as the synergy of people, processes, and technology enhancing the productivity and value of any business operation while reducing the cost of routine operations to a desired level.

##### **Assets Turnover Ratio**

The asset turnover ratio gauges a company's sales or revenues relative to the value of its assets. It serves as an indicator of how efficiently a company utilizes its assets to generate revenue. A higher asset turnover ratio signifies greater efficiency in generating revenue from assets, while a lower ratio suggests inefficiency in asset utilization

### Total Debt to Total Assets

Total-debt-to-total-assets is a leverage ratio that compares a company's debt to its assets. This metric allows analysts to evaluate a company's leverage in comparison to others in the industry, indicating financial stability. A higher ratio implies greater leverage and associated investment risks. This ratio assesses the portion of a company's assets financed by debt rather than equity, providing insights into its growth and asset acquisition over time.

### Operating Expenses

Operating expenses, or OPEX, encompass any expenses a company incurs during its day-to-day operations. Managers, regardless of the size of the enterprise, often seek ways to reduce operating expenses as these costs impact a business's profits. While operating expenses are unavoidable, understanding them helps business owners make informed decisions about areas that may require cost reduction.

### Gross Sales

Gross sales represent the total sales occurring within a specific timeframe, inclusive of all transactions before deducting various expenses such as returned items, taxes, fees, rent, utilities, payroll, and costs of retail items purchased for resale. It serves as a raw figure that provides a comprehensive view of a company's sales performance.

## **2.2 Empirical Review**

### **2.2.1 Articles Review on International Context**

Omah (2023) conducted a study to explore the correlation between value analysis and the return on assets of manufacturing companies in Nigeria. The research aimed to determine the relationship between value engineering and the pre-tax profit of manufacturing companies in Nigeria, as well as the connection between value engineering and the return on assets. The data were collected through questionnaires, and the Spearman rank order was employed to assess the relationships between variables. The findings revealed significant associations between value analysis and pre-tax profit, value analysis and return on assets, value engineering and pre-tax profit, as well as value engineering and return on assets for selected manufacturing companies in Nigeria.

Akinrinola, Tomori, and Audu (2023) investigated the impact of capital structure on the financial performance of quoted manufacturing firms in Nigeria. Employing panel least square multiple regression and utilizing secondary data from the financial statements of 14 sampled organizations spanning from 2011 to 2020, the study found a negative correlation between financial performance and the ratio of total debt to total equity. Moreover, the study revealed a statistically significant relationship between the ratio of long-term debt to total assets and financial performance.

Kepramareni, Apriada, and Putra (2022) explored the effects of credit risk, capital adequacy, liquidity, operational efficiency, and solvency on the financial performance of Bank Perkreditan Rakyat in Denpasar, Indonesia, from 2018 to 2020. The study used multiple linear regression analysis, and the results indicated that operational efficiency had a negative impact on financial performance, while credit risk, capital adequacy, liquidity, and solvency did not significantly affect financial performance during the specified period.

Aruwa and Naburgi (2022) examined the influence of capital adequacy on the financial performance, including profitability and saving mobilization, of quoted banks in Nigeria. Data collected from the Nigerian Deposits Insurance Corporation for the period of 1997-2011 were analyzed using ordinary least square regression. The study concluded that capital adequacy had an insignificant impact on financial performance, suggesting that other factors may play a more substantial role in influencing financial performance in the Nigerian banking sector.

Hameed, Jothr, and Ali (2022) evaluated bank performance by applying the PATROL model, focusing on capital adequacy, profitability, credit risk, regulation, and liquidity. The study concluded that the PATROL model played a vital role in assessing banking performance, providing insights into strengths and weaknesses. The model's elements guided decision-makers in banks to make informed decisions and take timely actions to enhance effectiveness and efficiency.

Kasmawati and Munika (2021) investigated the effects of capital structure, liquidity, and operational efficiency on conventional banks listed on the Indonesian stock exchange. The study used a saturated census sampling technique with 28 conventional banks. The findings indicated that Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), and

Operating Expenses to Operating Income (BOPO) had a positive effect on Return On Assets (ROA). The study suggested a sufficient closeness in the relationship between independent variables and ROA.

Pramesti, Yasa, and Ningsih (2021) examined the impact of capital structure and sales growth on the profitability and firm value of companies listed on the Indonesia Stock Exchange from 2008 to 2018. The study used secondary data and conducted hypothesis testing, revealing that capital structure had a positive and significant effect on profitability and firm value. In contrast, sales growth had a negative and non-significant effect on profitability and a positive and significant effect on firm value.

Iqbal and Anwar (2021) investigated the effect of Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), Operational Efficiency Ratio (OER), and Profit Sharing Ratio (PSR) on the financial performance of Islamic Manufacturing Companies. The study found that CAR had no effect on Return on Assets (ROA), NPF had a significant negative effect on ROA, OER had a significant negative effect on ROA, while FDR and PSR did not affect ROA.

Ali and Oudat (2021) explored the impact of accounting information systems on the financial sustainability of banks. The study reviewed conceptual, theoretical, and empirical literature, emphasizing the need for consistent results in evaluating the effects of accounting information systems on financial sustainability. The study noted the limited focus on cost implications and inconsistent results in advanced economies, emphasizing the need for further research.

Sukmadewi (2020) examined the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Operating-Income Expense Ratio (BOPO), Non-Performing Loans (NPL), and Net Interest Margin (NIM) on Return on Assets (ROA) for Banking Companies Listed on the Indonesia Stock Exchange from 2016 to 2018. The study found that CAR, BOPO, NPL, NIM, and LDR had a positive and significant effect on ROA, suggesting the importance of operational efficiency and asset management for profitability.

Ghorpade and Lad (2020) evaluated the performance of select Public Sector Banks in India using the CAMEL Rating System, focusing on parameters like Capital adequacy, Asset quality, Management quality, Earnings quality, and Liquidity. The study, covering

a five-year period from 2015 to 2019, found that Bank of Maharashtra performed best among the selected banks, while IDFC First Bank Ltd occupied the last position in the composite average ranking.

Melani, Suroso, and Musqori (2019) analyzed the effect of Capital Adequacy (CAR) and Liquidity (CR) on Profitability (ROA) in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (ISE) for the period of 2015-2018. The study, based on panel data regression analysis, concluded that CAR significantly influenced ROA, while CR did not have a significant impact on ROA.

Mouneswari, Mamilla, and Reddy (2019) reviewed studies on the efficiency of manufacturing companies, focusing on the performance of nationalized banking sectors in India. The research highlighted the importance of academic examinations to understand the structural existence and performance of the banking sector in the context of development financing.

Olarewaju (2016) explored the influence of the capital base of banks on the operational efficiency of banks in Nigeria from 2004 to 2013. The study, using two-way fixed effect regression techniques, found that debt to total equity, core capital ratio, and bank risk were significant in evaluating the impact of capital adequacy on the operational efficiency of Nigerian money deposit banks.

Gill, Singh, Mathur, and Mand (2014) investigated the relationship between changes in operational efficiency and changes in future performance of Indian manufacturing firms. The study, covering a five-year period from 2008 to 2012, found that changes in operational efficiency played a role in the future performance of Indian manufacturing firms.

Hamdi and Zarai (2013) examined the use of efficient earnings management (EM) or opportunistic EM by executives in Islamic banking institutions (IBIs). Analyzing a sample of 81 Islamic banks from 2000 to 2009, the study found a positive and significant relationship between EM proxy and future profitability, indicating a tendency toward efficient EM in IBIs.

Reddy (2013) conducted an analysis of the Andhra Pradesh State Financial Corporation (APSFC), focusing on various financial indicators such as capital adequacy ratio, asset

quality, operating profit, growth in net worth, and return on average assets. The study provided insights into the performance and financial health of the APSFC, along with suggestions for improvement.

These studies cover a range of topics, from the relationship between financial indicators to the evaluation of banking and manufacturing sector performance, providing valuable insights into various aspects of financial management and performance measurement.

Table 1

*Summary of Article Reviews*

S.N.	Author/ Years	Methodology	Finding
1	Akinrinola, Tomori, & Audu/ (2023)	The research employed panel least square multiple regression to analyze secondary data obtained from the financial statements of 14 sampled organizations spanning the years 2011 to 2020.	The findings indicated a negative correlation between financial performance of manufacturing firms and the total debt to total equity ratio. Additionally, the study revealed a statistically significant association between the ratio of long-term debt to total assets and financial performance.
2	Omah/ (2023)	Data generation involved the use of questionnaires, and the Spearman Rank Order was employed to determine the relationships between variables.	The results highlighted significant relationships between value analysis and pre-tax profit, value analysis and return on assets, as well as value engineering and pre-tax profit, along with a significant relationship between value engineering and return on assets for the selected manufacturing companies in Nigeria.
3	Wang, Geng, & Song/ (2022)	Using a dataset comprising 258 intelligent manufacturing listed companies in	The findings reveal that all factor capitals in the three models exhibit a notable positive influence on the performance of enterprises, with a

- China over the period from 2015 to 2020, this study focuses on material capital, human capital, knowledge capital, and technological capital as the input variables in the Cobb-Douglas production function. significant dual lag effect observed in both time and space.
- 4 Ogunode, Awoniyi, & Ajibade/ (2022) The research employed an ex-post facto research design, utilizing secondary data collected for the duration spanning. A purposive selection method was applied to choose a sample of thirty-eight non-financial firms out of a total of sixty-three listed entities. The collected data underwent analysis through multivariate regression. The research outcomes indicate that, among the variables studied, the capital adequacy ratio, equity capital/total assets ratio, and cost-income ratio exhibited a negative impact on corporate performance. Conversely, the debt equity ratio and firm size were found to have a positive influence on the corporate performance of non-financial firms listed in Nigeria.
  - 5 Hameed, Jothr and Ali /(2022) The study concluded that the PATROL model plays Banking performance through its five elements (capital adequacy, profitability, credit risk, regulation, liquidity).
  - 6 Kepramareni, Apriada and Putra /(2022) Data analysis techniques used multiple linear regression analysis, total sample of 23 and observation of 69. . The results of the study found that Operational Efficiency have a negative effect Financial Performance of Bank Perkreditan In the investigation of Bank Perkreditan

- Rakyat in Denpasar city from 2018 to 2020, it was revealed that Credit Risk, Capital Adequacy, Liquidity, and Solvency did not demonstrate a significant impact on the financial performance of the bank.
- 7 Pramesti, Yasa, & Ningsih, / (2021). This study uses secondary data Obtained from the Indonesia Stock Exchange in 2008-2018. Testing the hypothesis of the study used descriptive statistical test techniques and path analysis test with SPSS Profitability is positively and significantly influenced by capital structure. Sales growth, while negatively impacting profitability, does not exhibit statistical significance. Capital structure is positively and significantly associated with firm value. Sales growth has a positive and significant effect on firm value. Profitability demonstrates a positive and significant influence on firm value.
- 8 Putriani, Kasmawati and Munika / (2021) The data analysis technique used is multiple regression analysis with a significant level ( $\alpha$ ) of 0.05. Capital structure exerts a positive and significant impact on profitability. However, sales growth, despite negatively affecting profitability, lacks statistical significance. Moreover, there is a positive and significant correlation between capital structure and firm value. Additionally, sales growth is found to have a positive and significant effect on firm value. Furthermore, profitability exhibits a positive and significant influence on

- firm value.
- 9 Wang, Nguyen, & Dang/ (2021). This paper studied the top 12 real estate companies listed on Vietnam's stock market to develop a method that combines the Grey methodology and the Data Envelopment Analysis (DEA) Malmquist model, Intending to predict and evaluate their performances.
- 10 Mouneswari, Mamilla, and Reddy/ (2019) Regression and correlation. Studies in the realm of banking, whether conducted in India or internationally, predominantly focus on the institutional, functional, and developmental aspects of banks.
- 11 Uremadu and Duru-Uremadu/ (2018) The paper employed descriptive statistical analysis to analyze conceptually, selected indices of bank capital adequacy and performance. The results of our analysis corroborated the pre-existing economic consensus, emphasizing that capital adequacy represents just one facet of a bank's comprehensive stability. It affirms that a bank can remain profitable even with a modest capital base, given it sustains a well-balanced asset structure that ensures both robust liquidity and favorable profitability assessments.
-

### **2.2.2 Reviews of Thesis and Article in Nepalese Context**

Pokhrel (2018) conducted an analysis of joint venture Finance in Nepal, focusing on the composition of assets and liabilities, the utilization of assets, and the trends in deposits and loans. The study revealed that both NABIL and HBL performed well in collecting total deposits, indicating potential profitability through the mobilization of deposits in the productive sector. Additionally, the analysis of cash and bank balance positions demonstrated better performance in HBL, NABIL, and EBL, emphasizing their readiness to serve consumer deposits.

Subedi (2018) examined the total cost in comparison to deposits, analyzing the relationship of staff expenses and interest and operating expenses with total cost. The findings showed fluctuation in the total cost and an increasing trend in net profit for EBL. Staff expenses exhibited a rising trend in every fiscal year, and the analysis revealed a positive correlation between staff expenses and net profit.

Pradhan and Parajuli (2017) explored the impact of capital adequacy and cost-income ratio on the performance of Nepalese manufacturing companies, using return on assets and net interest margin as dependent variables. The study indicated a positive relationship between bank size and return on assets, while capital adequacy, cost-income ratio, equity capital to assets ratio, and liquidity ratio showed a negative impact on return on assets.

Malla (2015) conducted an analysis of liquidity management in a sample Finance, focusing on deposit and investment positions, the relationship between deposit, investment, loans and advances, and net profit, as well as trend analysis. The study revealed that the Finance maintained high liquidity ratios, and NABIL exhibited a higher total liability to total assets compared to HBL.

Shakya (2014) analyzed the financial performance of selected JVBs (joint venture banks), specifically NGBL and HBL, emphasizing liquidity ratios. The findings indicated that HBL was more efficient in liquidity and more leveraged than NGBL. HBL also demonstrated better conditions in terms of capital adequacy, activity, and profitability ratios.

Shrestha (2012) assessed the investment policy and strategies of banks, with SCBL having the highest mean current ratio and NABIL having the poorest current ratio. The

study found that NABIL maintained the highest cash and bank balance to total deposit ratio among the banks studied.

Dangi (2004) conducted a comparative study of the financial performance of SCBNL, NABIL, and HBL. The findings revealed unsatisfactory liquidity positions for all, high leverage, and low coverage ratios due to excessive use of debts. SCBNL was identified as better at mobilizing assets and had a higher earning power capacity, while HBL was better at lending. The study suggested improvements in the quality of current assets structure and an increase in equity base.

### **2.3 Research Gap**

This research is conducted using correlation and regression analysis. Three sample manufacture are taken from total 18 Manufacturing under studies cluster and random sampling methods is used for the sample selection. The research is don for the propose of achieving the objectives of to explore the factor which affect the profitability of the manufacturing company of Nepal, to analyze the relations of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with return on equity of the manufacturing company and to examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with return on equity of the manufacturing company. Only one dependent and four independent variables are taken under studies. Eight year data and descriptive research design methods employed.

Previous researches used banking sector more on study than manufacturing sector; if manufacturing sector are selected the study than only one company was taken as the sample, many of them only five years data are taken as observation, simple regression is calculated. Future researches may also use more data, more dependent and independent variable for studies.

## CHAPTER- III

### RESEARCH METHODOLOGY

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. In this chapter, researcher presents full road maps of research works.

#### 3.1 Research Design

This study has employed descriptive and casual comparative research designs to deal with issues associated with the determinants of dividend policy. Descriptive research design has been used in order to identify the factors affecting dividend policy and to get adequate information on such determinants. Moreover, this study depends on descriptive and analytical research design in order to investigate the direction and magnitude of the correlations among the dependent variable and the independent variables.

#### 3.2 Population and Sample

Sampling is done by purposive sampling. Sample purposive based because of the data availability in the web site for ten years. Total manufacturing listed in NEPSE are 18 in the mid July 2023. Similarly, financial statements of three manufacturing company for 10 years research period i.e. FY 2070 to FY 2079 has been taken as sample for the same purpose.

Table 2

#### *Sample of the Manufacturing*

S.N.	Manufacturing company's
1.	Unilever Nepal Company limited (UNCL)
2.	Bottlers Nepal Company Limited (Balaju) (BNCLB)
3.	Himalayan Distillery Company limited (HDCL)

#### 3.3 Nature and Sources of Data

Under this headline nature researcher explain what is the nature and sources of data. There are two natures of data, one is primary data and other is secondary data. Different

Types of sources are found in various research works. Some of them are; published source and unpublished sources. Published sources are; articles by researcher, annual report, newspapers, tax reports, government policies etc. Unpublished sources are; organizations internal decision making, minutes, vouchers or other management and board of director decisions etc.

### **3.4 Instrument of Data Collection**

Instrument refers to the tools that are used in collection of data. Secondary data are collected from the website of the concern banks. In order to collect the data from annual reports published of the banks. Economic report of NRB (Banking and Financial Statistics) and other published statistical data have been used, and to obtain the additional information, informal talks and procedures have been used. Primary data are collected by using different types of instrument, they are; questioners, observations, interviews, laboratory experiment, quasi experiment, scales are used.

### **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.

#### **3.5.2 Statistical Analysis**

##### **Descriptive Statistics Analysis**

Descriptive statistics on the factors examined in the research are offered in this section. The maximum, minimum, mean, and standard deviation values related to the variables under examination make up the descriptive statistics employed in this study.

##### **Average (Mean):**

The mean is the average or the most common value in a collection of numbers. In statistics, it is a measure of central tendency of a probability distribution along median and mode. It is also referred to as an expected value.

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

Where,

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

n = Variables

### Standard Deviation

Standard deviation measures the fluctuation that gives the similarity of the data. If the standard deviation is more than the fluctuation of the study data is more. If the standard deviation is less the fluctuation of the study data is less. The fluctuation of the research data is less than it is called more predictable and the fluctuation of the research data is high than the prediction of the next is less. Its mean the calculated trend of the research data reliability is based on the standard deviation which is less or more.

$$\text{Standard Deviation S.D } (\sigma) = \sqrt{\frac{1}{n} (X - \bar{X})^2}$$

Where,

$\bar{X}$  = Mean

n = Variable involved

### Correlation Analysis

The relationship has been explained by using Pearson correlation coefficient. The value of correlation coefficient ranges from -1 to +1. If correlation coefficient is exactly -1, two variables are said to have perfect negative correlation as such that they move together exactly into opposite direction. On the other hand, if correlation coefficient is +1, the variables are said to be perfectly positively related.

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

Where,

N = number of X and Y

$\sum XY$  = Sum of the product series X and Y

$\sum X$  = Sum of the series X

$\sum Y$  = Sum of the series Y

$\sum X^2$  = Sum of the square series X

$\sum Y^2$  = Sum of the square of the series Y

### Multiple Regression Analysis

Multiple regression analysis is a statistical methodology employed to scrutinize the correlation between a sole dependent variable, also known as the criterion, and numerous independent variables, referred to as predictors. The primary aim of multiple regression analysis is to forecast alterations in the dependent variable as a result of variations in the independent variables. Essentially, it gauges the efficacy of multiple regressions in forecasting outcomes. Additionally, the multiple determination, or R-squared, offers insights into the percentage of variability in the dependent variable elucidated by the regression equation. The formulation of the multiple regression equation for this research can be expressed as follows:

Model 1

$$ROE = \beta_0 + \beta_1 \times CAR + \beta_2 \times ATR + \beta_3 \times TDTA + \beta_4 \times OESR + e$$

Model 2

$$ROA = \beta_0 + \beta_1 \times CAR + \beta_2 \times ATR + \beta_3 \times TDTA + \beta_4 \times OESR + e$$

Where,

ROE = Return on Equity ratio

ROA= Return on Assets

CAR= Capital Adequacy ratio

ATR= Assets Turnover Ratio

TDTA= Total Debt to Total Assets

OESR= Operating expenses to Revenue

### 3.6 Research Framework

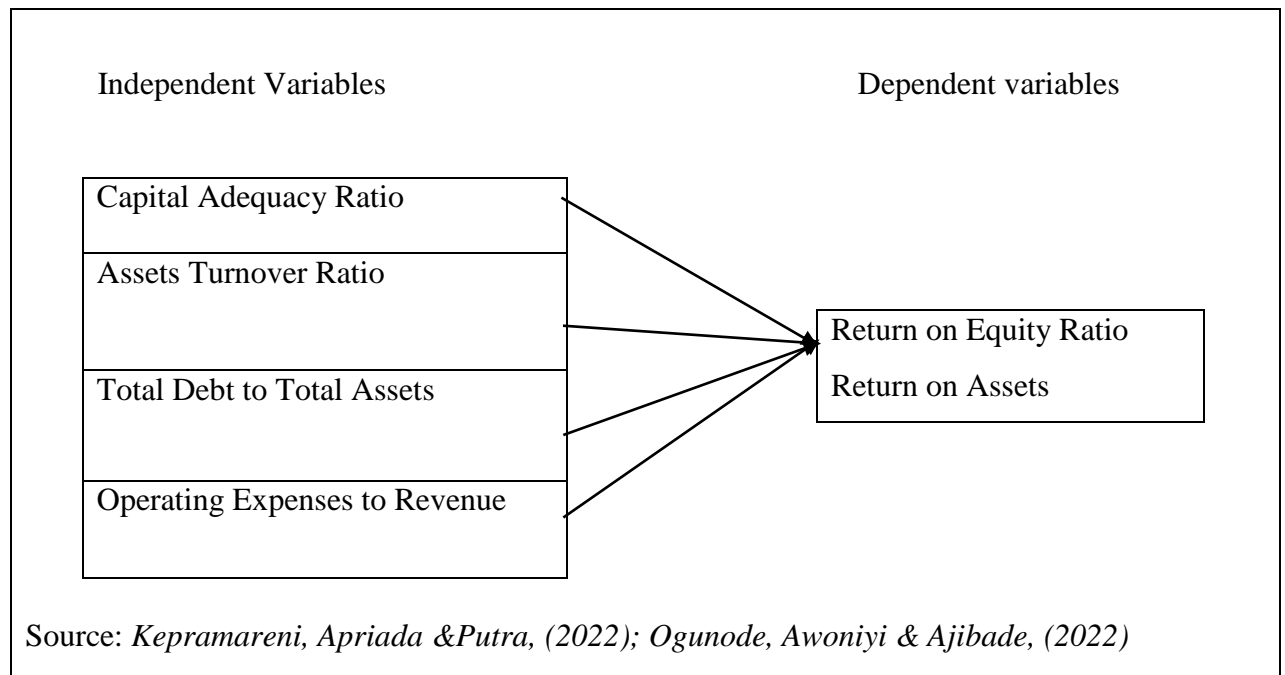


Figure 1: Conceptual Framework

### 3.7 Definitions of Variables

#### Capital Adequacy

The sufficiency of capital stands out as a crucial factor in determining financial stability and the security of a bank. It functions as a measure of a bank's capacity for expansion, maintenance, and sustained existence in the fiercely competitive and continually evolving financial industry. Capital adequacy involves the quantity of equity capital and additional securities that a bank safeguards as reserves against risky assets, serving as a protective measure to mitigate the potential of bank failure. This metric is instrumental in assessing whether a bank possesses adequate capital to support the risks inherent in its balance sheet, effectively addressing concerns related to bank solvency.

#### Assets Turnover Ratio

The asset turnover ratio gauges the value of a company's sales or revenues relative to the value of its assets. This ratio serves as an indicator of how efficiently a company utilizes its assets to generate revenue. A higher asset turnover ratio signifies greater efficiency in generating revenue from the company's assets. Conversely, a lower asset turnover ratio indicates inefficiency in using assets to generate sales.

#### Total Debt to Total Assets

The total-debt-to-total-assets ratio functions as a leverage metric, illustrating the extent of debt a company holds in comparison to its assets. Analysts use this metric to compare a company's leverage with that of others in the same industry, providing insights into the financial stability of the company. A higher ratio implies a greater degree of leverage (DOL) and, consequently, an increased investment risk. Over time, this leverage ratio reveals the company's asset acquisition and growth in relation to its funding structure. Investors use it to evaluate the company's ability to meet current debt obligations and assess its capacity to provide returns on investment, while creditors use it to determine the company's existing debt levels and repayment capabilities.

### Operating Expenses

Operating expenses encompass all expenditures that a company incurs during its regular day-to-day operations. Whether for a large corporation or a small family-run business, managers often seek ways to reduce operating expenses (OPEX) since higher costs diminish a business's profits. However, these expenses are an essential component of business operations and cannot be completely eliminated. Recognizing and understanding these expenses aid business owners in making informed decisions about where cost reductions may be feasible.

### Gross Sales

Gross sales, distinct from taxable gross sales, constitutes the raw figure encompassing all sales within a specific timeframe. It represents total sales before deducting various expenses such as returns, taxes, license fees, rent, utility bills, payroll, and costs associated with retail items purchased for resale. Understanding this distinction is crucial for accurately determining a company's profits.

### Return on Equity (ROE)

Return on Equity (ROE) is a financial ratio evaluating a company's profitability concerning shareholders' equity. Calculated by dividing net income by average shareholders' equity and expressed as a percentage, ROE provides insights into how effectively a company utilizes equity to generate profits. A higher ROE generally indicates proficient management in utilizing shareholders' funds for returns, but industry benchmarks and additional financial metrics should be considered for a comprehensive analysis.

### Return on Assets (ROA)

Return on Assets (ROA) is a financial metric assessing a company's profitability by examining its ability to generate earnings from total assets. Expressed as a percentage, ROA is calculated by dividing net income by average total assets. This ratio offers insights into the efficiency with which a company utilizes its assets to generate profit. A higher ROA suggests effective asset utilization and profitability, while a lower ROA indicates less efficient use of assets in generating earnings. Investors and analysts commonly use ROA to evaluate a company's financial performance and management efficiency.

## CHAPTER-IV

### RESULT AND DISCUSSION

This chapter is the main part of the report. Here researcher done his analysis work and found the solution of the problem based on objectives of the research. The first part of the research is result where as per the objectives the analysis is conducted they are descriptive statistics analysis, correlation analysis and regression analysis. The second part of the research is related to the discussion of the result. The discussion included the comparative study of the finding between the current research and previous research.

#### 4.1 Result

##### 4.1.1 Descriptive Statistics Analysis

To meet the objective one of the research, the descriptive statistics analysis is conducted. The descriptive statistics analysis is conducted for each selected sample manufacturing in collective as an industries based. The table below the minimum, maximum, mean and standard deviation of the research variables are calculated.

Table 3

*Descriptive Statistics Analysis*

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Equity	30	1.17	35.93	14.48	9.93
Return on Assets	30	-4.38	45.08	18.52	13.29
Capital Adequacy	30	36.80	89.10	57.07	13.14
Assets Turnover	30	.56	19.13	3.10	4.73
Total Debt to Total Assets	30	10.87	100.00	48.44	20.94
Operating expenses to Revenue	30	.59	10.99	4.62	3.518
Valid N (list wise)	30				

Source: *Appendixes*

Table 3 shows the descriptive statistics of the research variables for achieving the objective one of the research. The objectives one of the research is to explore the current

Situation of the dependent and independent variables. The dependent variable of the research are Return on Equity and Return on Assets. The independent variables of the research are Capital Adequacy, Assets Turnover, and Total Debt to Total Assets and Operating expenses to Revenue. The sample selected manufacturing are Unilever Nepal Company limited (UNCL), Bottlers Nepal Company Limited (Balaju) (BNCLB) and Himalayan Distillery Company limited (HDCL). The total observation of the research are 30 from each selected sample has 10 years of data or 10 observation.

The Return on Equity minimum, maximum, mean and standard deviation of the research are 1.17, 35.93, 14.48 and 9.93 respectively. The Return on Assets minimum, maximum, mean and standard deviation of the research are -4.38, 45.08, 18.52 and 13.29 respectively. The Capital Adequacy minimum, maximum, mean and standard deviation of the research are 36.80, 89.10, 57.07 and 13.14 respectively. The Assets Turnover minimum, maximum, mean and standard deviation of the research are .56, 19.13, 3.10 and 4.73 respectively. The Total Debt to Total Assets minimum, maximum, mean and standard deviation of the research are 10.87, 100.00, 48.44 and 20.94 respectively. The Operating expenses to Revenue minimum, maximum, mean and standard deviation of the research are 0.59, 10.99, 4.62 and 3.518 respectively.

The result from the table minimum, maximum, mean and standard deviation of variables are seem. The different between the minimum and maximum is very. The mean and minimum and mean and maximum to very large diriment. The Standard deviation is very high. The manufacturing industries of Nepal are seem, the Return on Equity, Return on Assets, Capital Adequacy, Assets Turnover, Total Debt to Total Assets and Operating expenses to Revenue related variables are very much fluctuating, very high to less in the year to year or they are not in consistence.

#### **4.1.2 Correlation Analysis**

Correlation analysis serves to unveil the direction and magnitude of the relationship between two sets of variables, illustrating how these variables co-vary and indicating the extent of their association. The Pearson correlation coefficient is utilized to expound on the relationship, with values ranging from -1 to +1. A correlation coefficient of exactly -1 signifies a perfect negative correlation, implying that the two variables move precisely in opposite directions. Conversely, a correlation coefficient of +1 indicates a perfect positive correlation, signifying that the variables are closely related in a positive direction.

Table 4  
*Correlation of the Variables*

		Return on Equity	Capital Adequacy	Assets Turnover	Total Debt to Total Assets	Operating expenses to Revenue
Return on Equity	Pearson Correlation	1	-.219	.384*	-.063	.537**
	Sig. (2-tailed)		.245	.036	.741	.002
	N		30	30	30	30
Return on Assets	Pearson Correlation		.856**	-.091	-.443*	-.473**
	Sig. (2-tailed)		.000	.631	.014	.008
	N		30	30	30	30
Capital Adequacy	Pearson Correlation		1	-.161	-.675**	-.275
	Sig. (2-tailed)			.395	.000	.141
	N			30	30	30
Assets Turnover	Pearson Correlation			1	.158	-.397*
	Sig. (2-tailed)				.405	.030
	N				30	30
Total Debt to Total Assets	Pearson Correlation				1	-.083
	Sig. (2-tailed)					.664
	N					30
Operating expenses to Revenue	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

Source: *Appendix*

Table 4 shows the correlation between the dependent and independent variables. The dependent variable of the research are Return on Equity and Return on Assets. The independent variables of the research are Capital Adequacy, Assets Turnover, and Total Debt to Total Assets and Operating expenses to Revenue. The sample selected manufacturing are Unilever Nepal Company limited (UNCL), Bottlers Nepal Company Limited (Balaju) (BNCLB) and Himalayan Distillery Company limited (HDCL). The total observation of the research are 30 from each selected sample has 10 years of data or 10 observation.

The relationship between the capital adequacy and return on equity is negative and not significant. The correlation negative shown by the 0.219 and significant by the 0.245 which is more than 0.05 so the relationship is not significant.

The relationship between the Assets Turnover and return on equity is positive and significant. The correlation positive shown by the 0.384 and significant by the 0.036 which is less than 0.05 so the relationship is significant called 5% level of significant.

The relationship between the Total Debt to Total Assets and return on equity is negative and not significant. The correlation negative shown by the 0.063 and significant by the 0.741 which is more than 0.05 so the relationship is not significant.

The relationship between the Operating expenses to Revenue and return on equity is positive and significant. The correlation positive shown by the 0.537 and significant by the 0.002 which is less than 0.01 so the relationship is significant called 1% level of significant.

The relationship between the capital adequacy and return on assets is positive and significant. The correlation positive shown by the 0.856 and significant by the 0.00 which is less than 0.01 so the relationship is significant, called 1% level of significant.

The relationship between the Assets Turnover and return on assets is negative and not significant. The correlation negative shown by the 0.091 and significant by the 0.631 which is more than 0.05 so the relationship is not significant.

The relationship between the Total Debt to Total Assets and return on assets is negative and significant. The correlation negative shown by the 0.443 and significant by the 0.014 which is more less 0.05 so the relationship is significant called 5% level of significant.

The relationship between the Operating expenses to Revenue and return on assets is negative and significant. The correlation negative shown by the 0.473 and significant by the 0.008 which is less than 0.01 so the relationship is significant called 1% level of significant.

#### **4.1.3 Multiple Regression Analysis**

Multiple regression analysis is a statistical method employed to examine the correlation between a sole dependent (criterion) variable and numerous independent (predictor) variables. The primary aim of multiple regression analysis is to forecast alterations in the dependent variable based on fluctuations in the independent variables. It assesses the effectiveness of multiple predictors in anticipating changes in the dependent variable.

Additionally, the coefficient of determination, or R-squared, denotes the proportion of variability in the dependent variable elucidated by the regression equation. Two models based on return on equity and return on assets are used for the analysis of the regression.

### Multiple Regression Analysis Based on Return on Equity

Return on equity is the dependent variable of the research. The dependent variable of the research is based on multiple regression equation using the Model summary, ANOVA and coefficient is calculated here under.

Table 5

#### *Model Summary of Model One*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853 <sup>a</sup>	.728	.685	5.568

a. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, Capital Adequacy

Source: *Appendix*

Table 5 shows the model summary of the research. The model summary here is presented based on independent variables Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy. The dependent variable is return on equity. The total observation of the research are 30. The table shows the adjusted R square is 0.685 which represent the total cumulative impact of the independent variables to the dependent variables is 68.5 %. The remaining 31.5% is impacted by the other variables which are not included in this research.

Table 6

#### *ANOVA of Model One*

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	2078.524	4	519.631	16.757	.000 <sup>b</sup>
	Residual	775.227	25	31.009		
	Total	2853.751	29			

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, Capital Adequacy

Source: *Appendixes*

Table 6 shows the ANOVA of model one of the research. The model one of the research dependent variable is return on equity and independent variables called predictor are Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy. The regression value of the research is significant because of the significant value is 0.000 which is less than 0.05.

Table 7

*Coefficient of Model One*

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.283	11.335		-.554	.584
	Capital Adequacy	.092	.125	.121	.730	.472
	Assets Turnover	1.574	.252	.752	6.244	.000
	Total Debt to Total Assets	-.013	.073	-.028	-.183	.856
	Operating expenses to Revenue	2.441	.375	.866	6.501	.000

a. Dependent Variable: Return on Equity

Source: Appendix

Table 7 shows the coefficient of the model one. The model one of the research dependent variable is return on equity and independent variables called predictor are Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy.

The impact of the capital adequacy to the return on equity is positive and not significant so the hypothesis is not true. The beta result, here is the 0.092 which represent the 1 percent change in to capital adequacy change in to the return on equity by 0.092 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.125. The impact is not significant because the significant is more than 0.05 i.e. 472.

The impact of the Assets Turnover to the return on equity is positive and significant so the hypothesis is true. The beta result, here is the 1.574 which represent the 1 percent change in to Assets Turnover change in to the return on equity by 1.574 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.252. The impact is significant because the significant is less than 0.05 i.e. .000.

The impact of the Total Debt to Total Assets to the return on equity is negative and not significant so the hypothesis is not true. The beta result, here is the 0.013 which represent the 1 percent change in to capital adequacy change in to the return on equity by 0.013 percent negative. The result calculated beta is very much accurate because the low standard error i.e. 0.073. The impact is not significant because the significant is more than 0.05 i.e. 0.856.

The impact of the Operating expenses to Revenue to the return on equity is positive and significant so the hypothesis is true. The beta result, here is the 2.441 which represent the 1 percent change in to Assets Turnover change in to the return on equity by 2.441 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.375. The impact is significant because the significant is less than 0.05 i.e. .000.

### **Multiple Regression Analysis Based on Return on Assets**

Return on Assets is the dependent variable of the research. The dependent variable of the research is based multiple regression equation using the Model summary, ANOVA and coefficient is calculated here under.

Table 8

#### *Model Summary of Model Two*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.899 <sup>a</sup>	.808	.777	6.28

a. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

Source: *Appendixes*

Table 8 shows the model summary of the research. The model summary here is presented based on independent variables Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy. The dependent variable is return on assets. The total observation of the research are 30. The table shows the adjusted R square is 0.777 which represent the total cumulative impact of the independent variables to the dependent variables is 77.7 %. The remaining 22.3% is impacted by the other variables which are not included in this research.

Table 9

*ANOVA of Model Two*

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	4142.786	4	1035.696	26.260	.000 <sup>b</sup>
	Residual	985.999	25	39.440		
	Total	5128.785	29			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

Source: *Appendices*

Table 9 shows the ANOVA of model one of the research. The model one of the research dependent variable is return on assets and independent variables called predictor are Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy. The regression value of the research is significant because of the significant value is 0.000 which is less than 0.05.

Table 10

*Coefficient of Model Two*

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
2	(Constant)	-30.018	12.784		-2.348	.027
	Capital Adequacy	.871	.141	.861	6.157	.000
	Assets Turnover	-.209	.284	-.074	-.736	.469
	Total Debt to Total Assets	.082	.082	.129	.992	.330
	Operating expenses to Revenue	-.966	.423	-.256	-2.281	.031

a. Dependent Variable: Return on Assets

Source: *Appendixes*

Table 10 shows the coefficient of the model one. The model one of the research dependent variable is return on assets and independent variables called predictor are Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover, and Capital Adequacy.

The impact of the capital adequacy to the return on assets is positive and significant so the hypothesis is true. The beta result, here is the 0.871 which represent the 1 percent change

in to capital adequacy change in to the return on assets by 0.871 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.141. The impact is significant because the significant is less than 0.05 i.e.0.000.

The impact of the Assets Turnover to the return on assets is negative and not significant so the hypothesis is not true. The beta result, here is the negative 0.209 which represent the 1 percent change in to Assets Turnover change in to the return on assets by 0.209 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.284. The impact is not significant because the significant is more than 0.05 i.e. .469

The impact of the Total Debt to Total Assets to the return on assets is positive and not significant so the hypothesis is not true. The beta result, here is the 0.082 which represent the 1 percent change in to capital adequacy change in to the return on assets by 0.082 percent positive. The result calculated beta is very much accurate because the low standard error i.e. 0.082. The impact is not significant because the significant is more than 0.05 i.e. 0.330.

The impact of the Operating expenses to Revenue to the return on assets is negative and significant so the hypothesis is true. The beta result, here is the 0.966 negative which represent the 1 percent change in to Assets Turnover change in to the return on assets by 0.966 percent. The result calculated beta is very much accurate because the low standard error i.e. 0.423. The impact is significant because the significant is less than 0.05 i.e. .0.031.

## **4.2 Discussion**

The objective one of the research is to explore current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and profitability of the manufacturing company of Nepal. It is found that the Return on Equity, Return on Assets, Capital Adequacy, Assets Turnover, Total Debt to Total Assets and Operating expenses to Revenue related variables are very much fluctuating, very high to less in the year to year or they are not in consistence. The result is consistence with the result of (Subedi, 2018; Malla, 2015; Pokhrel, 2018; Pradhan & Parajuli, 2017).

The second objectives of the research is to analyze the relationship of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. It is found that the relationship

between the capital adequacy and return on equity is negative and not significant. The result is consistency with the result of (Kepramareni, Apriada & Putra, 2022). The relationship between the Assets Turnover and return on equity is positive and significant. The result is consistency with the result of (Aruwa & Naburgi, 2022). The relationship between the Total Debt to Total Assets and return on equity is negative and not significant. The result is consistency with the result of (Hameed, Jothr & Ali, 2022). The relationship between the Operating expenses to Revenue and return on equity is positive and significant. The result is consistency with the result of (Kasmawati & munika, 2021). The relationship between the capital adequacy and return on assets is positive and significant. The result is consistency with the result of (Pramesti, Yasa & Ningsih (2021)). The relationship between the Assets Turnover and return on assets is negative and not significant. The result is consistency with the result of (Akinrinola, Tomori & Audu, 2023). The relationship between the Total Debt to Total Assets and return on assets is negative and significant. The result is consistency with the result of (Iqbal & Anwar, 2021). The relationship between the Operating expenses to Revenue and return on assets is negative and significant. The result is consistency with the result of (Ali & Oudat, 2021).

The third objective of the research is to examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. It is found that the impact of the capital adequacy to the return on equity is positive and not significant so the hypothesis is not true. The result is consistency with the result of (Omah, 2023). The impact of the Assets Turnover to the return on equity is positive and significant so the hypothesis is true. The result is consistency with the result of (Sukmadewi, 2020). The impact of the Total Debt to Total Assets to the return on equity is negative and not significant so the hypothesis is not true. The result is consistency with the result of (Ghorpade & Lad, 2020). The impact of the Operating expenses to Revenue to the return on equity is positive and significant so the hypothesis is true. The result is consistency with the result of (Melani, Suroso & Musqori, 2019). The impact of the capital adequacy to the return on assets is positive and significant so the hypothesis is true. The result is consistency with the result of (Mouneswari, Mamilla & Reddy, 2019). The impact of the Assets Turnover to the return on assets is negative and not significant so the hypothesis is not true. The result is consistency with the result of (Olarewaju, 2016). The impact of the Total Debt to Total

Assets to the return on assets is positive and not significant so the hypothesis is not true. The result is consistence with the result of (Gill et al., 2014). The impact of the Operating expenses to Revenue to the return on assets is negative and significant so the hypothesis is true. The result is consistence with the result of (Pradhan & Parajuli, 2017).

## CHAPTER- V

### SUMMARY AND CONCLUSION

#### 5.1 summary

Manufacturing companies, involved in transforming raw materials into sale-ready goods, engage in various processes utilizing facilities such as land, factories, machinery, transport vehicles, and ancillary infrastructure. The Capital Adequacy Ratio (CAR) serves as a pivotal metric in assessing company performance. By evaluating the CAR, one can ascertain the overall performance of the company, making it a valuable tool for appraising capital within a company. Capital holds significant importance for a company's business development, positioning the CAR as a crucial appraisal tool for investment decisions, especially for companies issuing shares, as it reflects the financial condition of the company.

Operational efficiency, narrowly defined, is the company's ability to provide products and services in a cost-effective manner without compromising quality. This efficiency is achieved through the optimal combination of people, processes, and technology. It serves as a measure of the company's operational effectiveness in delivering value.

Profitability, on the other hand, gauges the company's capacity to generate profits. It stands as an indicator of the company's ability to fulfill obligations to its stakeholders and plays a vital role in shaping the company's future prospects. Profitability is a key element influencing the company's outlook and its potential for sustained success. On the hand of background the research is conducted on “The Impact of Capital Adequacy and Operating Efficiency on Performance of Nepalese Manufacturing Company”.

The objectives of research are to explore current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and profitability of the manufacturing company of Nepal. To analyze the relationship of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. To examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. The problem question are what is the current Situation of capital adequacy,

total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and return on equity the profitability of the manufacturing company of Nepal? What are the relations of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with return on equity of the manufacturing company? Whether any impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with return on equity of the manufacturing company? The research use descriptive and casual comparative research design. The descriptive research design used for objectives one and casual comparative research design for objective two and three. The secondary data with three sample of the manufacturing out of eighteen are selected as an availability of data for ten years judgmental sampling. The descriptive statistics, correlation and regression analysis is conducted for the research. The SPSS and excel are the tools for analysis of the data. The finding of the research are the manufacturing industries of Nepal are seem, the Return on Equity, Return on Assets, Capital Adequacy, Assets Turnover, Total Debt to Total Assets and Operating expenses to Revenue related variables are very much fluctuating, very high to less in the year to year or they are not in consistence. The relationship between assets turnover and return on equity, operating expenses to revenue to return on equity, capital adequacy to return on assets, total debt to total assets to return on assets, operating expenses to return on assets are significant. The capital adequacy to the return on equity, total debt to total assets to return on equity and assets turnover and return on assets is significant relationship. The impact of assets turnover to the return on equity and operating expenses to revenue to the return on equity is significant. The capital adequacy to return on equity and total debt to total assets to the return on equity is insignificant impact. The capital adequacy to the return on assets and operating expenses to revenue to the return on assets is significant impact. The asset turnover to the return on assets and total debt to total assets to the return on assets is not significant impact.

## **5.2 Conclusion**

The objective one of the research is to explore current Situation of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio and profitability of the manufacturing company of Nepal. It is found that the Return on Equity, Return on Assets, Capital Adequacy, Assets Turnover, Total Debt to Total Assets and Operating expenses to Revenue related variables are very much fluctuating, very high to less in the year to year or they are not in consistence. In conclusion the current situation

of the capital adequacy, operating efficiency and profitability of the manufacturing company in Nepal are fluctuating nature or they are not consistence.

The second objectives of the research is to analyze the relationship of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. It is found that the relationship between assets turnover and return on equity, operating expenses to revenue to return on equity, capital adequacy to return on assets, total debt to total assets to return on assets, operating expenses to revenue to return on assets are significant. The capital adequacy to the return on equity, total debt to total assets to return on equity and assets turnover and return on assets is significant relationship. In conclusion the assets turnover, operating expenses to revenue, capital adequacy, and total debt to total assets is significant relationship to the profitability of the manufacturing company.

The third objective of the research is to examine the impact of capital adequacy, total turnover ratio, total debt to total assets ratio and operating expenses to sales revenue ratio with profitability of the manufacturing company. It is found that the impact of assets turnover to the return on equity and operating expenses to revenue to the return on equity is significant. The capital adequacy to return on equity and total debt to total assets to the return on equity is insignificant impact. The capital adequacy to the return on assets and operating expenses to revenue to the return on assets is significant impact. The asset turnover to the return on assets and total debt to total assets to the return on assets is not significant impact. In conclusion the capital adequacy, assets turnover ratio, operating expenses to revenue are significant impact to the profitability of the company.

### **5.3 Implications**

Capital adequacy holds paramount significance for all organizations, contributing significantly to their overall well-being. A robust capital base ensures the sound health of the organization. The judicious maintenance of capital, aligning it proportionally with the total assets, enhances the financial returns for the company. Operating efficiency, meanwhile, is perceived as the company's ability to curtail operating costs in pursuit of its objectives through an adept combination of the right personnel, processes, and technology. This is quantified by the ratio of operating expenses to operating income. It is intricately tied to the strengths and weaknesses of the company concerning its operational endeavors. The study delves into how much the company earns based on investments

related to operations, indicating the company's prowess in its operational activities. This research explores the relationship between capital adequacy in manufacturing companies and its impact on bank profitability, along with an examination of various factors influencing operating efficiency and their repercussions on overall profitability.

The following are implication of the research.

- To the company management for solving the problem of the profitability related.
- The other company which have profit motives are useful this research.
- To the investors understand the current status of the manufacturing industries in the view point of profitability.
- To the learner and scholar for their reference on the study.

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## APPENDICES

Year	CA	TA	E	CL	TL	Revenue	Profit	Operating expenses
2079	4190	5804	3652	1952	2152	7333	1541	532
2078	3672	4753	2605	2005	2148	5730	860	38
2077	2513	3723	1973	1736	1750	5547	358	33
2076	2871	3857	2324	1532	3857	5754	1065	41
2075	2505	3162	1903	1258	3162	4868	999	36
2074	2740	3321	2074	1234	1247	4442	965	34
2073	2556	3046	2048	986	997	3946	1121	24
2072	2546	3046	2048	876	978	3856	785	36
2071	2356	2945	1998	956	915	3756	856	56
2070	2298	2886	1978	888	876	3702	1100	32

Unilever Nepal Limited

In million

Unilever Nepal Limited- Ratio Calculated.

Year	ROE	ROA	CAR	ATR	TDTA	OESR
2079	14.56736	26.55065	62.92212	1.263439	37.07788	7.2548752
2078	1.458733	18.09384	54.80749	1.205554	45.19251	0.6631763
2077	1.67258	9.615901	52.9949	1.489927	47.0051	0.5949162
2076	1.7642	27.61213	60.25408	1.491833	100	0.7125478
2075	1.89175	31.59393	60.18343	1.539532	100	0.7395234
2074	1.639344	29.05751	62.45107	1.337549	37.54893	0.765421
2073	1.171875	36.80236	67.23572	1.295469	32.73145	0.6082108
2072	1.757813	25.7715	67.23572	1.265923	32.10768	0.93361
2071	2.802803	29.06621	67.8438	1.275382	31.06961	1.4909478
2070	1.617796	38.11504	68.53777	1.282744	30.35343	0.8643976

Bottler Nepal (Balaju)

In million

Year	CA	TA	E	CL	TL	Revenue	Profit	Operating expenses
2079	2396	4005	1980	1447	2024	3380	197	283
2078	2028	3771	1757	1429	2012	2098	61	223
2077	1823	3628	1718	1377	1906	3220	-16	248
2076	1671	3413	1779	1187	1633	5432	357	277
2075	1207	2772	1517	889	1252	3093	307	233
2074	1329	2751	1213	1184	1537	2742	244	218
2073	846	2142	1012	826	1127	2523	181	252
2072	1113	2262	853	1153	1406	2138	-99	235
2071	1056	2163	796	1356	1569	2156	170	118
2070	986	2013	746	1256	1486	2015	186	150

Bottler Nepal (Balaju)

Year	ROE	ROA	CAR	ATR	TDTA	OESR
2079	14.29293	4.918851	49.4382	0.843945	50.53683	8.3727811
2078	12.69209	1.617608	46.59242	0.556351	53.35455	10.629171
2077	14.43539	-0.44101	47.35391	0.887541	52.53583	7.7018634
2076	15.57055	10.46001	52.12423	1.591562	47.84647	5.0994109
2075	15.35926	11.07504	54.72583	1.115801	45.16595	7.5331393
2074	17.97197	8.869502	44.09306	0.996728	55.87059	7.9504012
2073	24.90119	8.450047	47.24556	1.177871	52.61438	9.9881094
2072	27.54982	-4.37666	37.70999	0.945181	62.15738	10.991581
2071	14.82412	7.859454	36.80074	0.996764	72.53814	5.4730983
2070	20.10724	9.23994	37.05912	1.000994	73.82017	7.4441687

Himalayan Distillery

In million

Year	CA	TA	E	CL	TL	Revenue	Profit	Operating expenses
2079	2561	3192	2844	306	347	7583	1056	388
2078	1702	2309	2004	269	294	6507	1041	378
2077	1397	1995	1252	711	742	4767	466	307
2076	745	1403	988	373	400	6388	537	355
2075	552	1200	796	367	404	5236	294	236
2074	360	1017	580	177	437	1347	48	100
2073	356	959	612	196	345	1654	248	103
2072	49	102	39	64	72	1523	8	10
2071	32	80	39	44	44	1530	13	9
2070	25	74	38	44	49	1190	5	8

Himalayan Distillery

Year	ROE	ROA	CAR	ATR	TDTA	OESR
2079	13.64276	33.08271	89.09774	2.375627	10.87093	5.1167084
2078	18.86228	45.08445	86.79082	2.818103	12.73278	5.8091286
2077	24.52077	23.3584	62.75689	2.389474	37.19298	6.4401091
2076	35.93117	38.27512	70.42053	4.5531	28.51033	5.5572949
2075	29.64824	24.5	66.33333	4.363333	33.66667	4.5072574
2074	17.24138	4.719764	57.03048	1.324484	42.96952	7.423905
2073	16.83007	25.86027	63.81648	1.724713	35.97497	6.2273277
2072	25.64103	7.843137	38.23529	14.93137	70.58824	0.6565988
2071	23.07692	16.25	48.75	19.125	55	0.5882353
2070	21.05263	6.756757	51.35135	16.08108	66.21622	0.6722689

Spss calculation

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Equity	30	1.17	35.93	14.4832	9.91994
Return on Assets	30	-4.38	45.08	18.5227	13.29867
Capital Adequacy	30	36.80	89.10	57.0731	13.14390
Assets Turnover	30	.56	19.13	3.1082	4.73556
Total Debt to Total Assets	30	10.87	100.00	48.4417	20.94728
Operating expenses to Revenue	30	.59	10.99	4.6270	3.51861
Valid N (listwise)	30				

### Correlations

		Return on Equity	Return on Assets	Capital Adequac y	Assets Turnover	Total Debt to Total Assets	Operatin g expenses to Revenue
Return on Equity	Pearson Correlation	1	-.275	-.219	.384*	-.063	.537**
	Sig. (2- tailed)		.142	.245	.036	.741	.002
	N	30	30	30	30	30	30
Return on Assets	Pearson Correlation	-.275	1	.856**	-.091	-.443*	-.473**
	Sig. (2- tailed)	.142		.000	.631	.014	.008
	N	30	30	30	30	30	30
Capital Adequacy	Pearson Correlation	-.219	.856**	1	-.161	-.675**	-.275
	Sig. (2- tailed)	.245	.000		.395	.000	.141
	N	30	30	30	30	30	30
Assets Turnover	Pearson Correlation	.384*	-.091	-.161	1	.158	-.397*
	Sig. (2- tailed)	.036	.631	.395		.405	.030
	N	30	30	30	30	30	30
Total Debt to Total Assets	Pearson Correlation	-.063	-.443*	-.675**	.158	1	-.083
	Sig. (2- tailed)	.741	.014	.000	.405		.664
	N	30	30	30	30	30	30
Operating expenses to Revenue	Pearson Correlation	.537**	-.473**	-.275	-.397*	-.083	1
	Sig. (2- tailed)	.002	.008	.141	.030	.664	
	N	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	.853 <sup>a</sup>	.728	.685	5.56858

a. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2078.524	4	519.631	16.757	.000 <sup>b</sup>
	Residual	775.227	25	31.009		
	Total	2853.751	29			

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

**Coefficients<sup>a</sup>**

Model		Unstandardized		Standardized		t	Sig.
		Coefficients		Coefficients			
		B	Std. Error	Beta			
1	(Constant)	-6.283	11.335			-.554	.584
	Capital Adequacy	.092	.125	.121		.730	.472
	Assets Turnover	1.574	.252	.752		6.244	.000
	Total Debt to Total Assets	-.013	.073	-.028		-.183	.856
	Operating expenses to Revenue	2.441	.375	.866		6.501	.000

a. Dependent Variable: Return on Equity

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899 <sup>a</sup>	.808	.777	6.28013

a. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4142.786	4	1035.696	26.260	.000 <sup>b</sup>
	Residual	985.999	25	39.440		
	Total	5128.785	29			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Operating expenses to Revenue, Total Debt to Total Assets, Assets Turnover , Capital Adequacy

		<b>Coefficients<sup>a</sup></b>				
		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-30.018	12.784		-2.348	.027
	Capital Adequacy	.871	.141	.861	6.157	.000
	Assets Turnover	-.209	.284	-.074	-.736	.469
	Total Debt to Total Assets	.082	.082	.129	.992	.330
	Operating expenses to Revenue	-.966	.423	-.256	-2.281	.031

a. Dependent Variable: Return on Assets