Project Report

"**The Fundamentals of Ratio Analysis with reference to HDFC Bank**"

Submitted to:

DMSR

G.S. College of Commerce and Economics, Nagpur

(An Autonomous Institution)

In partial fulfilment for the award of the degree of

Master of Business Administration

Submitted by:

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NAAC Accredited "A" Grade Institution

Academic Year 2022-2023

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Academic Year 2022-2023

CERTIFICATE

This is to certify that **Utkarsh Santosh Dubey** has submitted the project report titled, **The Fundamentals of Ratio Analysis with Reference to HDFC Bank** towards the partial fulfilment of **MASTER OF BUSINESS ADMINISTRATION** degree examination. This has not been submitted for any other examination and does not form part of any other course undergone by the candidate.

It is further certified that he has ingeniously completed his project as prescribed by **DMSR, G. S. College of Commerce and Economics, Nagpur, (NAAC Reaccredited "A" Grade Autonomous Institution)** affiliated to **Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.**

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Place: Nagpur
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Department of Management Sciences and Research,
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NAAC Accredited “A” Grade Institution

Academic Year 2022-2023

DECLARATION

I here-by declare that the project with title **“The Fundamentals of Ratio Analysis with Reference to HDFC Bank ”** has been completed by me in partial fulfilment of **MASTER OF BUSINESS ADMINISTRATION** degree examination as prescribed by **DMSR, G. S. College of Commerce and Economics, Nagpur, (NAAC Reaccredited "A" Grade Autonomous Institution)** affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and this has not been submitted for any other examination and does not form the part of any other course under taken by me.

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Academic Year 2022-2023

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I will fail in my duty if I do not thank the Non-Teaching staff of the college for their Co-operation.

I would like to thank all those who helped me in making this project complete and successful.

Utkarsh Dubey

Place: Nagpur
Date:

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CHAPTER - 1

INTRODUCTION

1.1 INTRODUCTION

Finance is the master key that unlocks all production and merchandising opportunities. For the preparation and administration of financial decisions, financial success is critical. It is a method of determining how well a firm uses its assets from its core business mode to generate money, as well as a method of determining an organization's overall financial health over time.

Every business, large, medium, or small, requires funding to continue operations and meet its goals. Finance is so important nowadays that it is rightfully referred to as the "living blood" of businesses. No business can achieve its goals without enough funding. As a result, the study of financial performance is critical, as it is the process of calculating the financial results of a company's operations.

Financial performance analysis is the process of determining a company's financial strengths and weaknesses by correctly defining the relationship between balance sheet and profit and loss account components. It also aids in short- and long-term forecasting, as well as the identification of growth through the use of various financial techniques in financial performance analysis. In the development of the Indian economy, the bank plays a critical role. In emerging countries, a sound and efficient banking sector provides the required financial inputs to the economy. It also assesses an organization's overall financial health over a period of time. The financial performance of an organization is concerned with the bank's financial strengths and weaknesses, as well as the relationship between the balance sheet and the income statement.

1.2 INDUSTRY AND COMPANY PROFILE

1.2.1 INDUSTRY PROFILE

A bank is a financial institution that offers its customers banking and other financial services. A bank is a financial institution that performs basic banking functions such as receiving deposits and disbursing loans. Money lenders conducted financial transactions prior to the foundation of banks. Interest rates were extremely expensive at the time, and there was no guarantee of public savings or loan consistency. To address these issues, the government built an organized banking system, which is strictly regulated.

The Reserve Bank of India is the country's central bank. The Reserve Bank of India (RBI) oversees and governs India's financial system. It is in charge of overseeing and implementing exchange control, banking laws, and the government's monetary policy. The Indian banking sector operates in accordance with the Reserve Bank of India's (RBI) standards.

The banking industry is the contemporary economy's lifeblood. The bank is crucial in terms o f deposit mobilization and credit disbursement to various sectors of the economy. It manages savings and current accounts, extends credit to borrowers through loans and credit cards, and acts as a trustee for its customers.

The structure of banking system in India consists of

1. RBI: The Reserve Bank supervises, control and regulates the activity of the banking sector. The Reserve Bank of India is the currency issuing authority of the country.

The main functions of the RBI are:

• Welfare of the public.

• To maintain the financial stability of the country.

• To execute the financial transactions safely and effectively.

• To develop the financial infrastructure of the country.

• To allocate the funds effectively without any partiality.

2. Scheduled commercial bank: Among the banks, the commercial banks are one of the oldest in the country. There are two sub types of commercial banks based on ownership and control over management. They are:

• Public sector banks: The public sector banks are where the government owns 50% or more stake. Currently there are 27 commercial public sector banks operating in India.

• Private sector banks: The private sector banks are where the majority of stake is held by the shareholders of the bank. Currently there are 15 private sector banks operating in India.

• Foreign banks: These banks are registered and have their headquarters in a foreign country but operate their branches in our country. Foreign banks have brought latest banking practices in India. Examples of foreign banks in India are: HSBC, Citibank, Standard chartered Bank, etc.

• Regional Rural Bank: The government of India set up a Regional Rural Banks on October 2, 1975. The bank provide credit to weaker sections of the rural areas, particularly the small and marginal farmers, agricultural laborer’s and small entrepreneurs. NABARD has the responsibility of laying down the policies for the RRB’s to oversee their operations, provide refinance facilities, to monitor their performance and to attend their problems.

• Co-operative Banks: These banks are government sponsored, government supported and government subsidized financial agencies in India. It aims at providing credit to primary agriculture credit societies at lower rate of interest. They are located in rural, urban semiurban areas.

1.2.2 Bank Profile

HDFC Bank, a subsidiary of the Housing Development Finance Corporation, was founded in 1994 and is headquartered in Mumbai, Maharashtra, India. Manmohan Singh, the then Union Finance Minister, launched the company's first corporate headquarters and a full-service branch at Sandoz House in Worli.The bank's distribution network had 5,500 branches in 2,764 cities as of 30 June 2019. In fiscal year 2017, it installed 430,000 point - of - sale terminals and issued 23,570,000 debit cards and 12 million credit cards. As of March 21, 2020, it had 1,16,971 permanent employees.

- **VISION**

To be the premiere financial partner in ensuring sustainable housing and living standards.

- **MISSION**

Committed to provide financial solutions for sustainable living and assist entrepreneurs in value additional.

- **VALUE**

The goal of HDFC Bank is to become a world - class Indian bank. It aims to accomplish two things: First and foremost, to be the preferred banking service provider for the target retail and wholesale customer categories. The second goal is to generate profitable growth that is in line with the bank's risk appetites. The bank is dedicated to upholding the highest ethical standards, professional integrity, corporate governance, and regulatory compliance possible.

The corporate concept of HDFC Bank is founded on five basic values:

• Customer focus
• Product leadership
• People
• Sustainability
• Operational excellence

Products and Services

HDFC Bank provides a number of products and services such as wholesale banking, retail banking, treasury, auto loans, two-wheeler loans, personal loans, loans against property, consumer durable loan, lifestyle loan and credit cards

- **Whole sale banking**

Wholesale banking is the provision of services by banks to larger customers or organizations such as mortgage brokers, large corporate clients, mid-sized companies, real estate developers and investors, international trade finance businesses, institutional customers (such as pension funds and government entities/agencies), and services offered to other banks or other financial institutions. Wholesale finance refers to financial services conducted between financial services companies and institutions such as banks, insurers, fund managers, and stockbrokers.

- **Retail Banking**

Retail banking, also known as consumer banking or personal banking, is the provision of services by a bank to the general public, rather than to companies, corporations or other banks, which are often described as wholesale banking. Banking services which are regarded as retail include provision of savings and transactional accounts, mortgages, personal loans, debit cards, and credit cards. Retail banking is also distinguished from investment banking or commercial banking. It may also refer to a division or department of a bank which deals with individual customers.

- **Credit Cards**

Credit card is a payment card issued to users (cardholders) to enable the cardholder to pay a merchant for goods and services based on the cardholder's accrued debt (i.e., promise to the card issuer to pay them for the amounts plus the other agreed charges). The card issuer

(Usually a bank or credit union) creates a revolving account and grants a line of credit to the cardholder, from which the cardholder can borrow money for payment to a merchant or as a cash advance. There are two credit card groups: consumer credit cards and business credit cards. Most cards are plastic, but some are metal cards (stainless steel, gold, palladium, titanium), and a few gemstone-encrusted metal cards.

Subsidiaries

1.HDFC Securities:

HDFC Securities Limited is a financial services Limited is a financial services intermediary and a subsidiary of HDFC Bank, a private sector bank in India. HDFC Securities was founded in the year 2000 and is headquartered in Mumbai with its branches across major cities and towns in India.

Products and services:

• Equities: Investment in stocks of listed companies.

• Mutual funds: Investment in mutual funds including equity, hybrid, tax saving or debt schemes from asset management companies.

• SIPs: Systematic investment plan that allows automated investments.

• IPOs: Investment in initial public offerings (IPO).

• Derivatives: Hedge or speculate on the price movement of stocks or index through its derivative products.

• Bonds, NCDs and Corporate FDs: Investment in fixed income instruments such as bonds, NCDs and Corporate FDs

1. HDFC ERGO General Insurance company:

HDFC ERGO is a 51:49 joint venture firm between HDFC International AG, one of the insurance entities of the Munich Re Group in Germany operating in the insurance field under the BFSI sectors. The company offers products in the retail, corporate and rural sectors. The retail sector products are health, motor, travel, home, personal accident and cybersecurity policy. Corporate products include liability, marine and poverty insurance. Rural sector caters the farmers with crop insurance and cattle insurance.

2. HDFC Financial Services Limited:

HDFC Financial Services, a subsidiary company of HDFC Bank, is one of the biggest Non-Banking Financial Company (NBFC) in our country who provides a variety of loans and finance to the people. It is known for providing various easy financial services and loans to their customers such as:

- Personal loan
- Doctor loan
- New to Credit loan
- Gold loan
- Car loan
- Loan against property
- Loan against insurance policies
- Two-wheeler loans and many more

3. Next Gen Publishing:

Next Gen Publishing Ltd was incorporated in October 2004 and commercial operations from January 2005 with the promise of offering the finest in the field of publishing. It is a publishing company created by its parent companies Forbes Group, a subsidiary of Shapoorji Pallonji Group and HDFC Bank. Its services include the following:

- Print Magazines
- Awards properties
- Digital Publishing

1.2 Statement of Problem

The statement of problem is based on finance and aims to analyse the financial performance of the HDFC bank for the past 5 years. Financial performance analysis enables the outsiders and investors to evaluate the past and current performance and financial position and to predict future performance. The study is conducted to know whether the financial performance in the organization is sound or not with the help of last five years financial statements

1.3 Objective of the study

- To analyses the financial performance of HDFC bank for the years from 2018-2023.
- To examine the liquidity and solvency position of the bank
- To examine the profitability position of the bank
- To Get Idea how the Ratio Analysis can be done.
- To Practically implement the Theoretical Knowledge in Practical.

1.4 Research Design

1.4.1 Nature of the study

Study is analytical in nature, meaning that it deals primarily with secondary data collected from the HDFC Bank's financial statements over the last five years.

1.4.2 Nature of Data

The data used is secondary in nature. Secondary data are those data which have already been collected and stored.

1.4.3 Sources of data

Secondary data had been collected from annual report published by the Bank. These annual reports had been downloaded from the official website of the company.

1.4.4 Period of Study

The study on financial performance of HDFC BANK Ltd is confined to a period of years from2018-2019 to 2022-2023. It took 3 weeks to collect the data and concluded on the study

1.4.5 Hypothesis

H0: It Is Assumed that if the CAGR of the Bank is not Negative, then bank is performing well.

H1: If the CAGR is Not Positive the bank needs to change its Strategies.

H3: We can not judge the whole performance of bank based on ratio Analysis.

1.5 Sample Design

Sample used in this study is HDFC BANK Ltd. Company is randomly chosen.

1.6 Tools for analysis

• Ratio analysis

• Comparative Balance sheet

1.7 Limitations of the Study

• The study takes into account only a limited period of five years.

• It considers only monetary aspects. Non-monetary aspects like human behaviour, their relationships, etc. are not considered.

• The study possesses the limitations of secondary data i.e, Annual reports of the bank taken from the official website.

1.8 Scheme of Study

Chapter 1 Introduction: This chapter deals with the introduction of the study, statement of the problem, the scope of the study, objectives of the study, methodology, framework of analysis, and chapter scheme.

Chapter 2 Review of Literature: This chapter deals with the previous works related to the topic financial performance analysis.

Chapter 3: Theoretical framework: The third chapter gives sufficient knowledge of financial performance analysis and theoretical framework of study.

Chapter 4: Data analysis and interpretation: Data analysis and interpretation Fourth chapter explain data analysis and interpretation.

Chapter 5: Findings, Suggestions and Conclusion: This chapter explains findings, suggestions, and conclusions.

CHAPTER – 2

REVIEW OF LITERATURE

2.1 Review of Literature

Review of literature aims to summarize major studies that have been published on the topic. It provides theoretical knowledge on the selected topic.

2.2 Empirical Literature

Empirical literature deals with past research studies which includes facts and figures identified through various experiments.

1. **(Dr K Sreenivas, L Saroja 2013)[1]**: Entitled a comparative study of financial performance of HDFC Bank and ICICI Bank. Study revels there is no significance difference in the performance of HDFC Bank and ICICI Bank, but they conclude that HDFC Bank financial performance is slightly shows an increase in compared with ICICI Bank.
2. **(Dr B Sudha, P Rajendran 2019)[2]:** Conducted astudy on financial health of Axis Bank & HDFC Bank for the time period of 2013-2014 to 2017-2018 by using various statistical tools and ratio analysis for analysing data. The study conclude that overall financial performance of Axis Bank is less compared the HDFC Bank.
3. **(A Jaiswal, C Jain 2016)[3]:** Conducted a comparative study of financial performance of SBI & ICICI Bank in India. This study evaluates the financial performance of Indian Banks with help of CAMEL MODEL. The result of the study clarifies that the financial performance of SBI is little bit more than ICICI Bank and also market position is high, but in other terms ICICI Bank is performing well in terms of NPA.
4. **(Nandini Thakur 2020)[4]:** Conducted a study on the financial statement analysis of HDFC Bank. The study is conducted over past Five years (2015-2019). The study conclude that financial performance of the bank was strong during the period of the study.
5. **(Dr R Malini, Dr A Meharaj Banu 2019)[5]:** This study examined the financial performance of Indian Tobacco Corporation Ltd. Objective of the study was to analysis the liquidity, profitability, Solvency possession of the firm within the period from 1st April 2013 to 31st March 2017. Study reveals that the financial performance is better.
6. **(Mabwe Kumbirai, Robert Webb 2010)[6]:** This Study Investigate performance of commercial bank in South Africa for the period 2005 to 2009.This study reveals that the performance of the bank is better in the first two years but later its performance fall is noticed due to the global financial crisis in 2007.The study conclude that the performance and profitability is falling.

CHAPTER – 3

THEORETICAL FRAMEWORK

3.1 INTRODUCTION

This chapter shows relevant concepts and theories related with the study and frames a relationship between them.

Meaning of Finance

Business concern needs finance to meet their requirements in the economic world. Any kind of business activity depends on finance. Hence, it is called as lifeblood of business organization. Whether the business concerns are small or big, they need finance to fulfil their business activities. In the modern world, all the activities are concerned with economic activities and very particular to earning profit through any venture or activities. The entire business activities are directly related with making profit. A business concern needs finance to meet all the requirements. Hence finance may be called as capital, investment, fund etc, but each item is having different meanings and unique characters. Increasing the profit is the main aim of any kind of economic activity.

Financial Analysis

Financial analysis is the process of Identifying the strength and weakness of the company with the help of accounting information provided by the financial statements of profit and loss account and balance sheet. It is a process of evaluation of relationship between components part of financial statement to obtain better understanding of firm position and performance.

Tools of financial analysis

A Number of techniques or devices are used to undertake financial analysis. The fundamental objective of analytical method is to simply the data into understandable terms. The following are the important tools of financial analysis.

. Comparative statement

. Common Size statement

. Trend Analysis

. Ratio Analysis

. Fund Flow Analysis

. Cash Flow Analysis

Comparative Statement

Comparative statement is those statement which is used to study financial position for two or more periods. It is also Called as horizontal financial analysis.

Types of Comparative Statement

1 Comparative Balance sheet

2 Comparative Profit and Loss Account

Comparative Balance Sheet

It shows the account of current assets and current liability on different dates and also shows the increase and decrease in these accounts.

Comparative Profit and Loss Account

It shows the operational results and progress of business in a given period of time

Common Size Statement

Common size statement is another technique of financial analysis. Common size financial statement is those statement in which terms are converted into percentages taking some common base. These statements are also called 100 percent statement or common percentage. Common size statement includes common size balance sheet and common size profit and loss account.

Ratio Analysis

The term accounting ratios is used to describe significant relationship between figures shown on balance sheet, in a profit and loss account, in a budgetary control system or in any, other part of the accounting organization. Ratio simply refers to one number expressed in terms of another number. Ratio analysis is a technique of analysis and interpretation of financial statement. It is the process of establishing and interpreting the various ratios for helping in making certain decision. However, ratio analysis is not an end to itself. It is only a means of better understanding of financial strength, weakness of a firm. Calculation of mere accounting ratios does not serve any purpose unless several appropriate ratios are analysed and interpreted.

Objectives of Ratio Analysis

•To study the short-term solvency of a firm.

•To study the long-term solvency of a firm.

•To determine the profitability of a firm.

•To measure the performance of a firm.

•To facilitate the process of financial forecasting.

•To communicate the strength and weakness of a firm.

•To enable managerial decision making.

Liquidity Ratio

The term liquidity refers to the firm's ability to meet its current liabilities. Liquidity ratios are used to measure the liquidity position or short-term financial position of a firm. These ratios are used to assess the short-term debt paying ability of a firm, important liquidity ratios are current ratio and quick ratio.

Current Ratio

Current ratio may be defined as the relationship between current assets and current liabilities. This ratio is also known as working capital ratio. It is a measure of general liquidity and is the most widely used to make the analysis of short term financial or liquidity of a firm. It is calculated by dividing the total current assets by total current liabilities and the ideal current ratio is 2:1. It is calculated as follows

$$\text{Current Ratio} = \frac{\text{Current asset}}{\text{Current liabilities}}$$

The higher the current ratio, the greater the firm's ability to meet the short-term debts. A very high current ratio indicates too much of money is blocked in currentassets etc. In short, a very high current ratio indicates that the firm will find it difficult to pay off its debts.

Quick Ratio

The term liquidity ratio refers to the ability of a firm to pay off its short-term obligations as and when they become due. Cash in hand and cash at bank are the

most liquid asset. The other assets included in the liquid assets are bills receivables, sundry debtors, marketable and short term or temporary investments. The Ideal liquid or quick ratio is 1:1. The liquid ratio can be calculated as follows

$$\text{Quick ratio} = \frac{\text{Liquid assets}}{\text{Current liabilities}}$$

Quick Assets = Current Assets - (stock + prepaid expenses)

Liquid ratio is considered to be superior to current ratio in testing the liquidity position of a firm. If the current ratio is 2:1 and quick ratio is 1:1; the liquidity position may be considered satisfactory. If the current ratio is higher than 2:1, but quick ratio is less than 1:1, it indicates excessive inventory.

Absolute Liquid Ratio or Cash Ratio

This ratio establishes the relationship between super quick assets and quick liabilities. And it is taken as a ratio of absolute liquid assets or absolute quick assets include cash in hand, cash at bank and marketable securities or short-term investments. It is also known as cash ratio. And ideal absolute liquid ratio is 0.5: 19

$$\text{Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$$

Solvency Ratio

Solvency ratio is one of the various ratios used to measure the ability of a company to meet its long-term debts. Solvency ratio is also called leverage ratio. It focuses on the long-term sustainability of a company instead of the current liability payments.

Proprietary Ratio

Proprietary ratio establishes the relationship between shareholders or proprietors fund and total assets. This ratio shows how much funds have been contributed by shareholders in the total assets of the firm. Proprietary ratio is also known as equity ratio or net worth ratio. It is computed as follows:

$$\text{Proprietary Ratio} = \frac{\text{Shareholder's fund}}{\text{Total assets}}$$

This ratio shows financial health of the firm. A high ratio indicates safety to the creditors and low ratio show greater risk to the creditors. The ideal ratio is 0.5:1or above.

Profitability Ratios

The ultimate aim of any business enterprise is to earn maximum profit. To the management, profit is the measure of efficiency and control. Profitability ratio measures the ability of the firm to earn an adequate return on sales, total assets and invested capital. There are two types of profitability ratios. First, profitability based on sales and it includes gross profit ratio, operating ratio, operating profit ratio and net profit ratio. Second, profitability ratio based on investment and it includes return on investment, return on shareholders fund ratio, return on equity ratio and return on total assets. Profit is important for everyone associated with the company including creditors and owners.

Return on shareholder's fund

This is the ratio of net profit to shareholder's fund or net worth. It measures the profitability from shareholders point of view. This ratio is called the 'mother of all the ratio'. This is perhaps the most important ratio because it measures the return that is earned on the owner's capital. It is calculated as follows:

$$\text{Return on shareholders' fund} = \frac{\text{Net profit after interest and tax}}{\text{Shareholder's fund}}$$

Return in Investment (ROI)

When a firm invest money in a business, it naturally expects adequate return on its investment. Therefore, the firm wants to know how much profit is earning on its investment. For this, ROI is computed. It establishes the relationship between return and investment. It is also called accounting rate of return.

$$\text{ROI} = \frac{\text{Profit before interest and tax}}{\text{Capital employed}}$$

Capital employed may be gross capital employed or net capital employed. Gross

capital employed means total assets minus current liabilities. Alternatively, it refers to total of share capital, revenue reserves, debenture and other long-term loans. Profit before interest and tax is calculated as gross profit minus operating expenses. The ideal return on investment ratio is 15%. The higher the return on investment, greater is the overall profitability and more is the efficient use of capital employed.

Net Profit Ratio

Net profit ratio is the ratio of net profits to revenues for accompany or business segment. It measures the overall profitability.Net profit and net sales are the two components of net profit ratio. Net profit is the final profit after adjusting all expenses and all incomes. The main objectives of the ratio is to measure the overall profitability. This ratio indicates how much of the sales are left after meeting expenses. The ideal net profit ratio is 5% - 10%.

$$\text{Net profit ratio} = \frac{\text{Net Profit}}{\text{Net sales}} \times 100$$

Net profits can be taken as profit before tax and profits after tax. Higher the ratio, better is the profitability.

Fund Flow Analysis

A fund flow statement means a statement which shows increase or decrease in working capital during a period. The fund flow statement contains the source of funds, use of funds and changes in working capital. Changes in working capital are obtained by preparing a statement called ‘Statement of changes in working capital’. It shows the changes in current asset and current liability. Fund flow statement is also known as ‘ where got and where gone statement’ or ‘statement of changes in financial position’.

Cash Flow Analysis

Cash flow statement is a statement showing the changes in cash position from one period to another. It explains the reasons for increase or decrease in the amount of cash between two balance sheet dates. In other words, it explains the reasons for inflow or outflow of cash. It is the statement of sources and use of cash.

CHAPTER 4

RATIO ANALYSIS AND INTERPRETATION

4.1 Ratio analysis

One of the most powerful tools in financial analysis is the ratio analysis. It is the procedure for calculating and understanding different ratios. The ratio analysis is used to investigate a company's liquidity, profitability, and solvency. The financial statements may be analysed more clearly with the use of ratios, and decisions can be taken based on this analysis.

4.1.1 Liquidity Ratio

(a) Current Ratio

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liability}} \qquad \text{(Ideal Ratio = 2:1)}$$

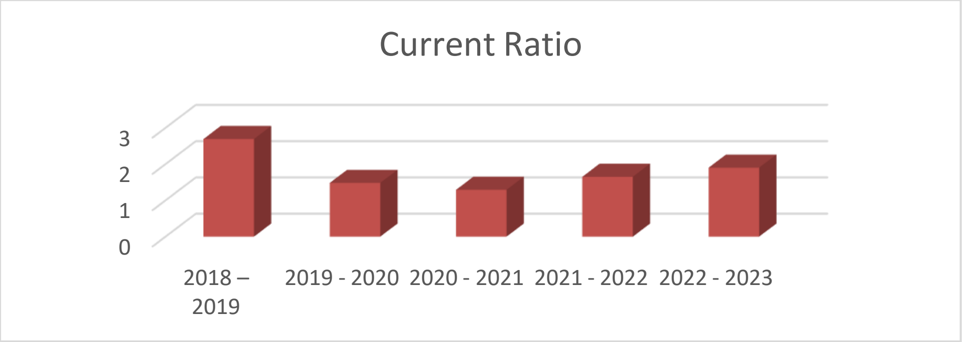
Table 4.1 Showing Current Ratio

Year	Current Asset	Current Liability	Current Ratio
2018 – 2019	122915.08	45763.72	2.69
2019 - 2020	81347.64	55108.29	1.48
2020 - 2021	86618.72	67394.4	1.29
2021 - 2022	119470.4	72602.15	1.65
2022 - 2023	1606915.69	84407.46	1.90
Mean	**344370**	**63664.33**	**1.65**
Standard Deviation	**619117.4**	**13900.25**	**0.62**
CV	**1.64**	**0.20**	**0.34**
CAGR	**0.44%**	**0.06%**	**0.12%**

Source: Compiled from annual report of HDFC Bank

Table 4.1 shows current assets and current liabilities over a period of 5 years from 2018-2019 to 2022- 2023. The average current ratio is 1.65 and its Standard Deviation is 0.62 Coefficient of Variation is 0.34 and CAGR follows a Positive Trend. Current ratio is high during period 2018 – 2019.

Figure 4.1 Showing Current Ratio



4.1.2 Leverage / Solvency Ratio

Solvency or Leverage ratios are used to analyses the long-term financial position of the firm. In other words, these ratios are used to analyze the capital structure of a firm.

(a) Debt Equity Ratio

Debt to equity ratio is the most commonly used ratio to test the solvency of a firm. This ratio indicates the relative proportion of debt and equity in financing the assets of the firm.

Debt Equity Ratio = Total Debt / Equity Shareholders Fund (Ideal ratio =1:1)

Table 4.2 Showing Debt Equity Ratio

Year	Total Debt	Equity	Total Debt Equity Ratio
2018 – 2019	717668.58	89462.35	8.02
2019 - 2020	911875.61	106295.00	8.58
2020 - 2021	1040226.05	149206.35	6.97
2021 - 2022	1292130.83	170986.03	7.56
2022 - 2023	1470547.54	203720.83	7.22
Mean	**1086489.72**	**143934.11**	**7.67**
Standard Deviation	**299352.69**	**46684.93**	**0.64**
CV	**27.55**	**32.43**	**8.38**
CAGR	**-0.59**	**0.54**	**0.82**

Source: Compiled from annual report of HDFC Bank & Some are Hypothetical Data

The above table shows the Debt Equity Ratio. The average Debt Equity Ratio is 7.67 and its standard deviation is 0.64, the coefficient of variation is 8.38 and CAGR follows a Positive Trend. The ideal debt equity ratio is 1:1. During the five years of study the debt equity ratio is very high. These indicates that the higher proportion of debt content in the capital structure.

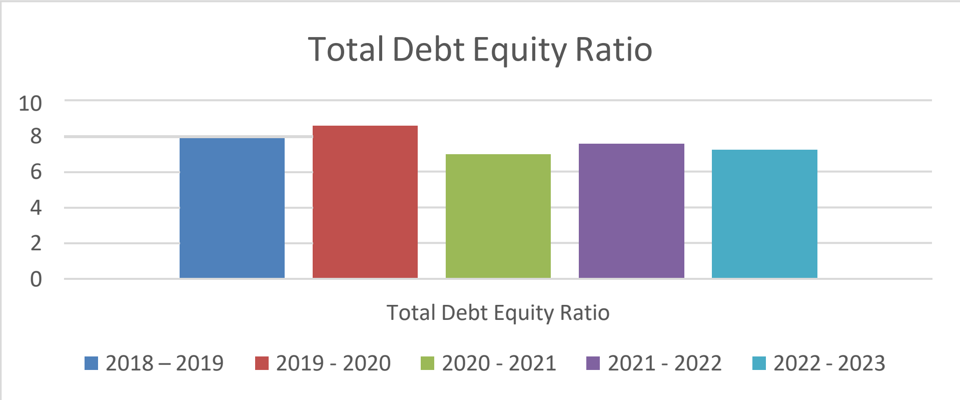


Figure 4.2 Showing Debt Equity Ratio

(b) Proprietary Ratio

Proprietary ratio establishes the relationship between shareholders or proprietors fund and total assets. This ratio shows how much funds have been contributed by shareholders in the total assets of the firm. Proprietary ratio is also known as equity ratio or net worth ratio.

Proprietary Ratio = Shareholder Fund / Total Asset (Ideal ratio= .5:1)

Table 4.3 Showing Proprietary Ratio

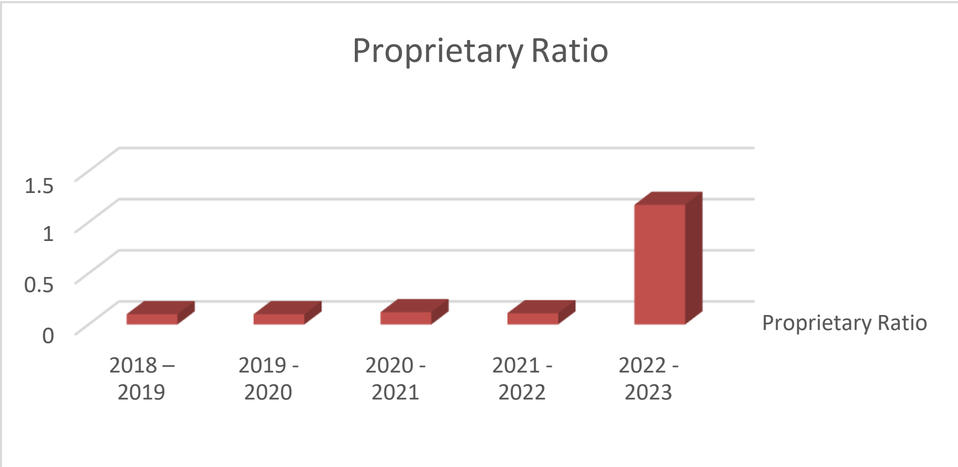
Year	Shareholder's fund	Total Asset	Proprietary Ratio
2018 – 2019	89462.35	863840.2	0.1
2019 - 2020	106295	1063934.31	0.1
2020 - 2021	149206.35	1244540.69	0.12
2021 - 2022	170986.03	1530511.27	0.11
2022 - 2023	203720.83	174670.53	1.17
Mean	**143934.11**	**975499.4**	**0.32**
Standard Deviation	**46684.93**	**510401.01**	**0.47**
CV	**32.43**	**52.32**	**1.47**

CAGR	0.54	0.96	1.25

Source: Compiled from annual report of HDFC Bank

The above table shows the proprietary ratio. The average proprietary ratio is .32 and its standard deviation is .47. The coefficient of variation is 1.47 an CAGR follows a positive trend. The ratio is high during the period 2022-23. It indicates that the margin for meeting no operating expenses, creating reserves, and paying dividend is less.

Figure 4.3 Showing Proprietary Ratio



(c) Solvency Ratio

Solvency ratio is one of the various ratios used to measure the ability of a company to meet its long-term debts. Solvency ratio is also called leverage ratio. It focuses on the long-term sustainability of a company instead of the current liability payments.

$$\text{Solvency Ratio} = \frac{\text{Total Asset}}{\text{Total Debt}}$$

Table 4.4 Showing Debt Solvency Ratio

Year	Total Asset	Total Debt	Solvency Ratio
2018-2019	863840.20	717668.53	1.20
2019-2020	1063934.31	911875.61	1.17
2020-2021	1244540.69	1040226.05	1.20
2021-2022	1530511.27	1292130.83	1.18
2022-2023	1746870.53	1470547.54	1.19
Mean	**1289939.40**	**1086489.71**	**1.19**
Standard Deviation	**354034.16**	**299352.70**	**0.01**

CV	20.27	20.36	1.18
CAGR	**0.60**	**0.59**	**0.80**

Source: Compiled from annual report of HDFC Bank & Some are Hypothetical Data

Generally, higher the solvency ratio the stronger is its financial position and vice versa. From the above data, the assets are more than the outside liabilities. In all year's solvency ratio is above 1:1, it indicates that there is no difficult in paying off its outside liabilities.

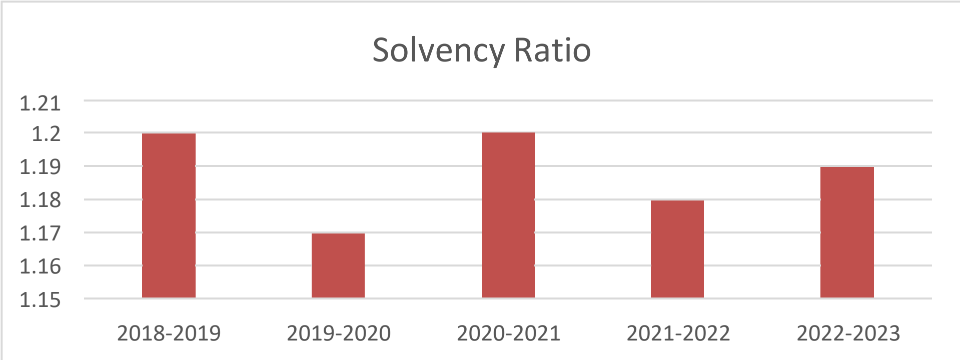


Figure 4.4 Showing Solvency Ratio

(d) Fixed Asset to Net Worth Ratio

Fixed assets to net worth ratio show the relationship between fixed assets and shareholder's fund. Usually, fixed assets are purchased by using owner's fund such as equity capital, reserves and surplus, retained earnings etc. If the ratio is less than 100%, it implies that owner's fund are more than total fixed assets and part of the working capital is financed by shareholders fund and vice versa.

Fixed Asset to net worth ratio = Fixed Asset / Net Worth

Ideally a Fixed Asset to net worth ratio of 0.50 or Lower is Considered Good

Table 4.5 Showing Fixed asset to Net worth ratio

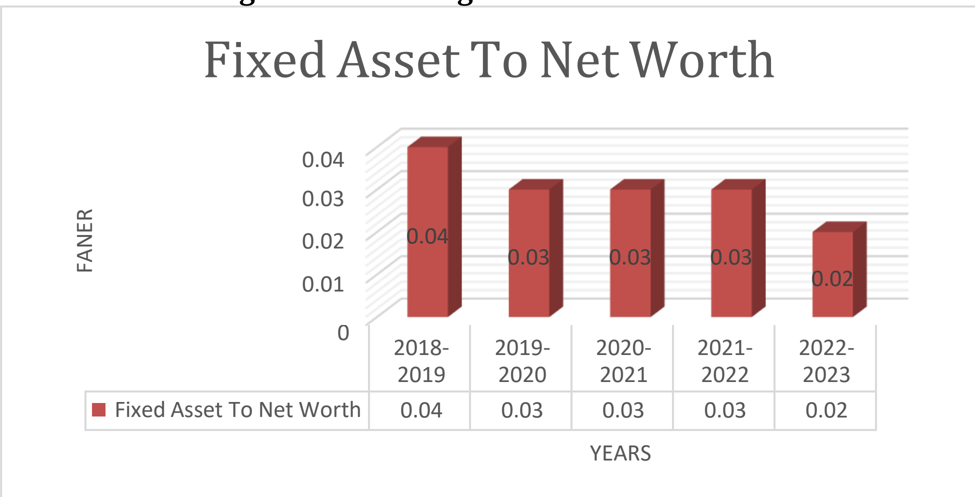
Year	Fixed Asset	Net worth	Fixed Asset To Net worth Ratio
2018-2019	3626.74	89462.35	0.04
2019-2020	3607.20	106295.00	0.03
2020-2021	4030.00	149206.35	0.03
2021-2022	4431.92	170986.03	0.03
2022-2023	4909.32	203720.83	0.02
Mean	**4121.04**	**143934.11**	**0.03**

Standard Deviation	555.58	46684.93	0.01
CV	13.48	32.43	22.54
CAGR	0.73	0.54	0.88

Source: Compiled from annual report of HDFC Bank

The above table shows the Fixed Asset to net worth ratio. The average Fixed Asset to net worth ratio is 0.03 and its standard deviation is 0.01. the coefficient of variation is 22.54 and CAGR follows a Positive Trend. The table shows fixed assets to proprietary ratio of the concern. Ratio less than 1 indicates that all fixed assets are purchased out of proprietor's fund and a part of proprietor's fund is invested in working capital.

Figure 4.5 Showing Fixed Asset to net worth ratio



(e) Capital Gearing Ratio

Capital gearing ratio is the ratio between total equity and total debt; this is a specifically important metric when an analyst is trying to invest in a company and wants to compare whether the company is holding a right capital structure or not.

$$\text{Capital Gearing Ratio} = \frac{\text{Fixed Income Bearing fund}}{\text{Equity Shareholder Fund}}$$

Table 4.6 Showing Capital Gearing Ratio

Year	Fixed Income Bearing fund	Equity Shareholder Fund	Capital Gearing Ratio
2018-2019	717668.53	89462.35	8.02
2019-2020	911875.61	106295.00	8.58
2020-2021	1040226.00	149206.35	6.97

2021-2022	1292130.80	170986.03	7.56
2022-2023	1470547.50	203720.83	7.22
Mean	**1086489.69**	**143934.11**	**7.67**
Standard Deviation	**299352.69**	**46684.93**	**0.64**
CV	**27.55**	**32.43**	**8.38**
CAGR	**0.59**	**0.54**	**0.82**

Source: Compiled from annual report of HDFC Bank & Some are Hypothetical Data

The above table shows the Capital Gearing Ratio. The average Capital Gearing Ratio is 7.67 and its standard deviation is 0.64. the coefficient of variation is 8.38 and CAGR follows a Positive Trend.

Figure 4.6 Showing Capital Gearing Ratio

Profitability ratio

Profitability ratio measures the ability of the firm to earn an adequate return on sales, total assets and invested capital

(a) Operating profit ratio

Operating profit express the relationship between operating cost and sales. It indicates the overall efficiency in operating in business.

Operating Profit Ratio = Operating Profit / Total Income

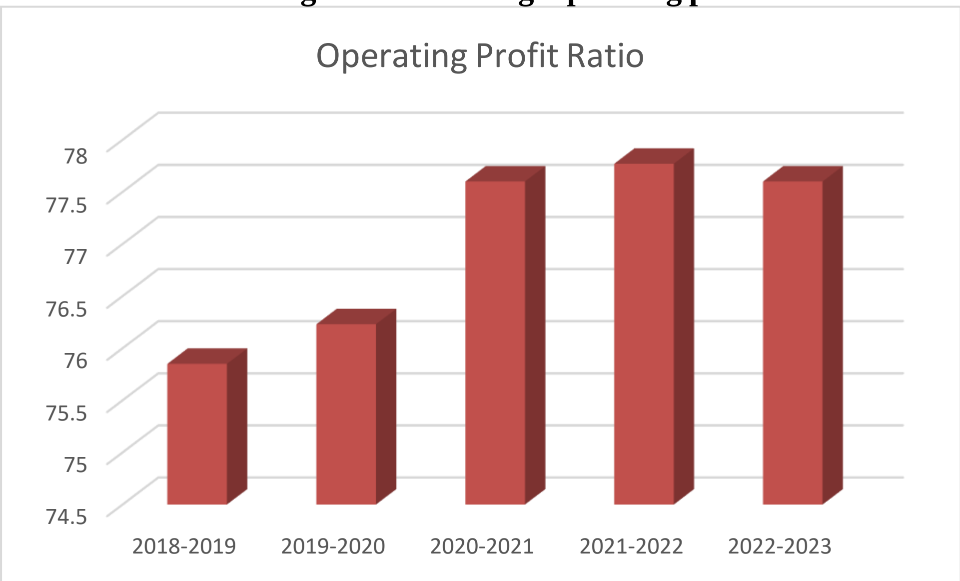
Table 4.7 Showing Operating profit ratio

Year	Operating Profit	Total Income	Operating Profit Ratio
2018-2019	61899.12	81602.46	75.85
2019-2020	72771.28	95461.66	76.23
2020-2021	90478.57	116597.94	77.60
2021-2022	107375.94	138073.47	77.77
2022-2023	113340.49	146063.12	77.60
Mean	**89173.08**	**115559.73**	**77.01**
Standard Deviation	**21965.88**	**27365.27**	**0.90**
CV	**24.63**	**23.68**	**1.16**
CAGR	**0.63**	**0.64**	**0.80**

Source: Compiled from annual report of HDFC Bank

The above table shows the Operating Profit Ratio. The average Operating Profit Ratio is 77.01 and its standard deviation is 0.90, the coefficient of variation is 1.16 and CAGR follows a Positive trend.

Figure 4.7 Showing Operating profit ratio



(b) Net Profit Ratio

Net profit ratio is the ratio of net profit earned by a business and its net sales;it measures overall profitability.

Net Profit Ratio = $\frac{\text{Net Profit}}{\text{Total Income}} \times 100$

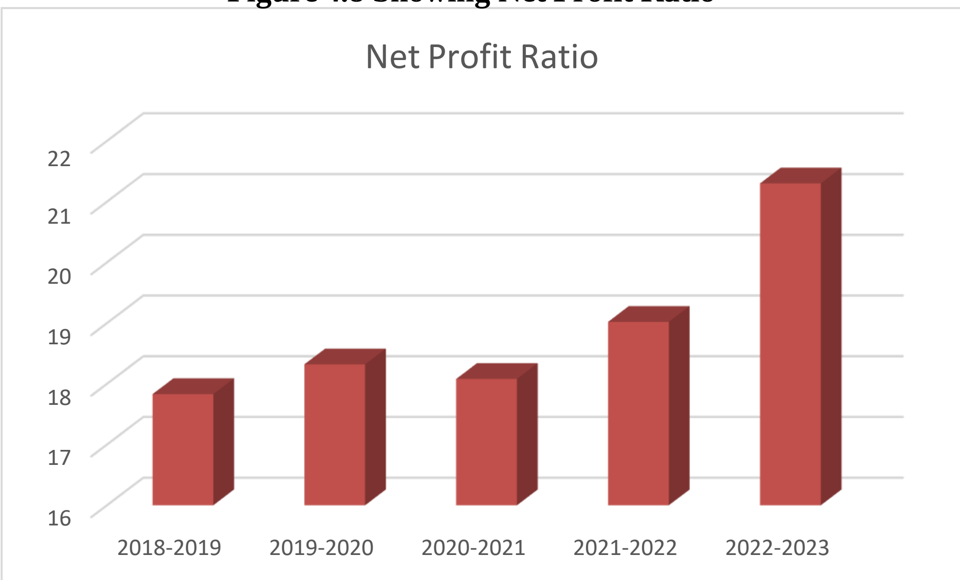
Table 4.8 Showing Net Profit Ratio

Year	Net Profit	Total Income	Net Profit Ratio
2018-2019	14549.64	81602.46	17.83
2019-2020	17486.73	95461.66	18.32
2020-2021	21078.17	116597.94	18.08
2021-2022	26257.32	138073.47	19.02
2022-2023	31116.53	146063.12	21.30
Mean	**22097.68**	**115559.73**	**18.91**
Standard Deviation	**6669.25**	**27365.27**	**1.41**
CV	**30.18**	**23.68**	**7.46**
CAGR	**0.57**	**0.64**	**0.76**

Source: Compiled from annual report of HDFC Bank & Some are Hypothetical Data

The above table shows the Net Profit Ratio. The average Net Profit Ratio is 18.91 and its standard deviation is 1.41. the coefficient of variation is 7.46 and CAGR follows a Positive trend. Here the bank has a very high net profit ratio and is above its idle ratio. Hence this indicates there is high efficiency as well as profitability for the company and they have to maintain this same satisfactory level as well.

Figure 4.8 Showing Net Profit Ratio



(C) Return On Investment

It establishes the relationship between return and investment. It is also called accounting rate of return.

ROI = Profit before interest and tax / Capital employed

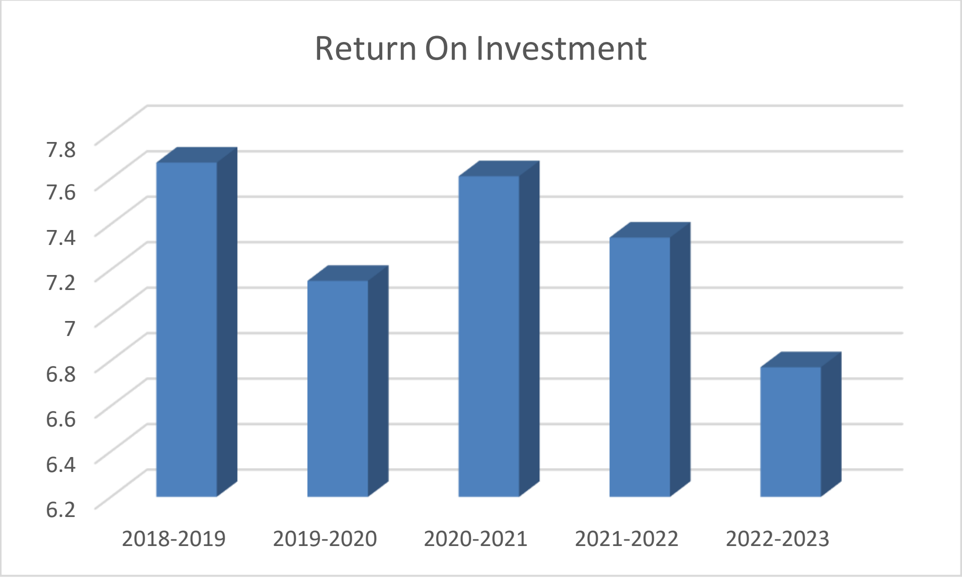
Table 4.9 Showing Return on Investment

Year	Operating Profit	Capital Employed	Return On Investment
2018-2019	61899.12	807130.88	7.67
2019-2020	72771.28	1018170.60	7.15
2020-2021	90478.57	1189432.50	7.61
2021-2022	107375.94	1463116.90	7.34
2022-2023	113340.49	1674268.40	6.77
Mean	**89173.08**	**1230423.86**	**7.31**
Standard Deviation	**21965.88**	**345345.01**	**0.37**
CV	**24.63**	**28.07**	**5.01**
CAGR	**0.63**	**0.59**	**0.82**

Source: Compiled from annual report of HDFC Bank & Some are Hypothetical Data

The above table shows the return on investment. The average return on investment is 7.31and its standard deviation is 37. the coefficient of variation is 5.01 and CAGR follows a Positive Trend. The figure shows that bank is not having sufficient return on capital employed. Its idealratio is 15%. Overall banks profitability is low and shows that there is inefficient use of capital employed.

Figure 4.9 Showing Return on Investment



(d)Return on shareholder fund

This is the ratio of net profit to shareholder's fund or net worth. It measures the profitability from shareholders point of view. This ratio is called the 'mother of all the ratio'. This is perhaps the most important ratio because it measures the return that is earned on the owner's capital. It is calculated as follows:

Return on shareholders fund = Net profit after interest and tax / Shareholders Find *100

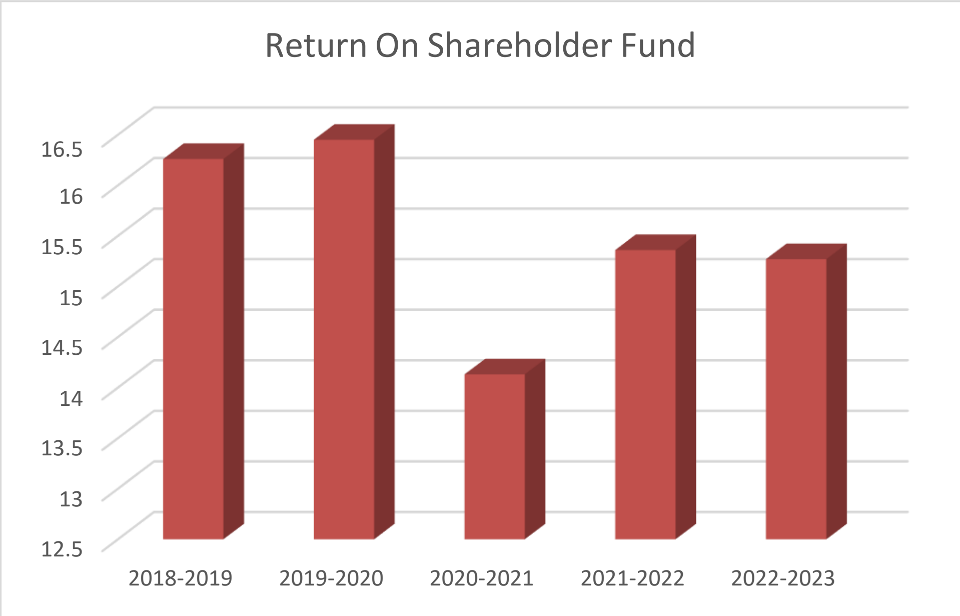
Table 4.10 Showing Return on shareholder fund

Year	Net Profit	Shareholder Fund	Return On Shareholder Fund
2018-2019	14549.64	89462.35	16.26
2019-2020	17486.73	106295.00	16.45
2020-2021	21078.17	149206.35	14.13
2021-2022	26257.32	170986.03	15.36
2022-2023	31116.53	203720.83	15.27
Mean	**22097.68**	**143934.11**	**15.49**
Standard Deviation	**6669.25**	**46684.93**	**0.93**
CV	**30.18**	**32.43**	**5.99**
CAGR	**0.57**	**0.54**	**0.81**

Source: Compiled from annual report of HDFC Bank

The above table shows the return on shareholder fund. The average return on investment is 15.49 and its standard deviation is 0.93. the coefficient of variation is 5.99 and CAGR follows a Positive Trend. The ideal ratio of return on shareholders' fund is 15%. From the above figure banks Return on shareholders' fund in all the 5 year is more thanthe standard ratio, which means there is better utilization of owner's fund and higher productivity.

Figure 4.10 Showing Return on shareholder fund


Return On Shareholder Fund
16.5
16
15.5
15
14.5
14
13.5
13
12.5
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023

COMPARATIVE BALANCE SHEET

Table 4.14 showing comparative balance sheet of financial year 2018 -19 to 2019 -2020

Particulars	2018-19	2019-20	Amount Of Increase /Decrease	Percentage Of Increase/Decrease
Capital And Liabilities				
Capital	544.66	548.33	3.67	0.67
Reserves and Surplus	148661.69	170437.7	21776.01	14.65
Deposits	923140.93	1147502.3	224361.36	24.3
Borrowings	117085.12	144628.54	27543.42	23.52
Other Liabilities and Provisions	55108.29	67394.4	12286.11	22.29
Total	**1244540.69**	**1530511.3**	**285970.57**	**22.98**
Assets				
Cash And Balances with RBI	46763.62	72205.12	25441.5	54.4
Balances with Other Banks	34584.02	14413.6	-20170.42	-58.32
Investments	290587.88	391826.66	101238.78	34.84
Advances	819401.22	993702.88	174301.66	21.27
Fixed Assets	4030	4431.92	401.92	9.97
Other Assets	49173.95	53931.09	4757.14	9.67
Total	**1244540.69**	**1530511.3**	**285970.57**	**22.98**

During the financial year 2019-2020 Balance with other banks decreased by 58.32 and banks advance, investments and deposit increased.

Table 4.15 showing comparative balance sheet of financial year 2019 -20 to 2020 -2021

Particulars	**2020-21**	**2021-22**	**Amount Of Increase /Decrease**	**Percentage Of Increase/Decrease**
Capital And Liabilities				
Capital	548.33	551.28	2.95	0.54
Reserves and Surplus	170437.7	203169.55	32731.85	19.2
Deposits	1147502.3	1335060.2	187557.93	16.34
Borrowings	144628.54	135487.32	-9141.22	-6.32
Other Liabilities and Provisions	67394.4	72602.15	5207.75	7.73
Total	1530511.3	1746870.5	216359.26	14.14
Assets				
Cash And Balances with RBI	72205.12	97340.74	25135.62	34.81
Balances with Other Banks	14413.6	22129.66	7716.06	53.53
Investments	391826.66	443728.29	51901.63	13.25
Advances	993702.88	1132836.6	139133.75	14
Fixed Assets	4431.92	4909.32	477.4	10.77
Other Assets	53931.09	45925.89	-8005.2	-14.84
Total	1530511.3	1746870.5	216359.26	14.14

During the financial year 2021-2022 borrowings is decreased by 6.32% and other assets decreased by 14.84 and deposit, investments, advances is increased.

Table 4.16 showing comparative balance sheet of financial year 2021 -2022 to 2022-2023

Particulars	2021-2022	2022-2023	Amount of Increase / Decrease	Percentage of Increase / Decrease
Capital & Liabilities				
Capital	551.28	557.97	6.69	1.21
Reserves and Surplus	203169.55	279641.05	76471.5	37.63
Deposits	1335060.2	1559217.44	224157.24	16.79
Borrowings	135487.32	184817.21	49329.89	36.41
Other Liabilities & Provisions	72602.15	84407.46	11805.31	16.26
Total	**1746870.5**	**2068535.04**	**321664.54**	**18.41**
Assets				
Cash And Balances with RBI	97340.74	129995.64	32654.9	33.55
Balances with Other Banks	22129.66	22331.29	201.63	0.91
Investments	443728.29	455535.69	11807.4	2.66
Advances	1132836.6	1368820.93	235984.33	20.83
Fixed Assets	4909.32	6083.67	1174.35	23.92
Other Assets	45925.89	85767.83	39841.94	86.75
Total	**1746870.5**	**2068535.04**	**321664.54**	**18.41**

During the financial year 2022-2023 borrowings is Increased by 36.41% and other assets Increased by 86.75 % and deposit, investments, advances is increased.

CHAPTER – 5

FINDINGS, HYPOTHESIS TESTING, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

- During the study period the current ratio of bank is close to the ideal ratio 2:1, during the 2 years from 2018-19 to 2019-20. The ratio was slightly low in the year 2018-19 and beyond the standard ratio in 2020-21.
- The ideal debt equity ratio is 1:1. During the five years of study the debt equity ratio is very high. These indicates that the higher proportion of debt content in the capital structure.
- The ideal proprietary ratio is high during the year 2020-21. The bank having low ratio during the last four years from 2018-19 to 2020-21.A low ratio indicates the firm is more dependent on creditors for its working capital.
- During the period of study the solvency ratio is satisfactory.
- Fixed asset to net worth ratio is less than one it indicates that all fixed asset are purchased out of proprietors fund and a part of proprietor fund is invested in working capital.
- The Return on investment shows that the bank is not having the sufficient return on capital employed. It’s ideal ratio is 15%oveall bank profitability is low.
- During the period of study net profit is very high and is above ita ideal ratio its indicates the bank have high profitability.
- In the financial year 2018-19 the fixed assets of the bank Increased by 8.48 % from the previous year. There was only 1.36 % increase in the capital of the bank. While the balances with other banks increased to 24.77 % in the year. The bank deposits increased by 17.79 % and the advances provided increased by 19.37 %.
- During the financial year 2019 -2020 the fixed asset is deceased by .54 % and also other asset and other liability and provision decreases, the bank borrowings is increased by 66.29 % and investment is increased by 12.93 %.
- During the financial year 2018-2019 borrowings decreased by 4.89 % cash and Balance with RBI decreased by 55.32. While banks deposit increased by 40.54% and advances increased by 24.47%.
- During the financial year 2019-2020 Balance with other banks decreased by 58.32and banks advance, investments and deposit increased.
- During the financial year 2020-2021 borrowings is decreased by 6.32% and other assets decreased by 14.84 and deposit, investments, advances is increased.

5.3 Hypothesis Testing

Based on above Calculation the Hypothesis testing are as follows.

- The CAGR of the bank is Not Negative Hence Hypothesis H0 is True
- The Bank needs to Change its Debt policy as CAGR of Total Debt is -0.59 Hence Hypothesis H1 is True.
- It’s absolutely True that the performance of the bank is based on various Platforms, hence it cannot be judge only by One, Therefore Hypothesis H2 is True.

5.2 SUGGESTIONS

- Bank should focus on increasing the current assets and decreasing the current liability so as to maintain satisfactory level of current ratio.
- The bank needs to improve the long-term financial position
- The bank should follow the recommendations of financial auditor,
- The bank should take steps to improve its overall efficiency.
- The bank has to reduce its overall debt.

5.3 CONCLUSIONS

The study mainly concentrates on the analysis of financial performance and soundness of the bank. It helps to understand the working of the bank. From the study of financial performance of HDFC BANK it can be concluded that the bank has satisfactory position with regard to profitability and the bank needs to improve its liquidity and solvency. If the bank continues to work with more efficiency, it can have greater success in the near future.

BIBLIOGRAPHY

BOOKS

1. Jain, S. (2008). Cost and management accounting. Ludhiana: Kalyani Publishers.
2. Introduction to Management Accounting – Horngreen and Sundlem
3. Principles of Management Accounting – Manmohan & Goyal
4. Management Accounting – Dr. E.B. Khedkar, Dr. D.B. Bharati and Dr. A. B. Kharpas.
5. Cost and Management Accounting – S.M.Inamdar
6. Management Accounting – Dr. Mahesh Kulkarni.
7. Management Accounting 3rd Ed. – Khan & Jain

WEBSITE

- https://www.wikipedia.org/
- https://shodhganga.inflibnet.ac.in/
- https://www.moneycontrol.com/