Comparative Financial Analysis of State Bank of India and HDFC Bank

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Executive Summary

Following some significant changes in monetary policy, India's banking sector has come under scrutiny. The cost of funds for banks has increased significantly as the Reserve Bank of India (RBI) raised interest rates to help the falling Indian currency, the Rupee. This may show up as a rise in non-performing assets (NPAs) and a drop in profitability. Internal and external factors have an effect on bank profitability. The aim of this paper is to compare and evaluate the financial performance of India's largest public and private sector banks and also to understand their trends of NPAs through secondary data analysis. Both banks' earnings were guided by bank-specific metrics and risk factors. Leverage financial ratios of SBI were found at higher default risk than HDFC. Productivity measures were the key drivers of profits at India's largest private sector bank HDFC but not at SBI. Asset usage efficiency measures were almost same of both the banks. NPA ratios were much higher at India's largest public sector bank SBI. The single most important determinant of SBI proved to be the liquidity ratios. Two sample T test assuming equal variances was also conducted to check if there was significant difference between the NPA ratio of SBI and HDFC bank over the last 3 years.

Chapter I

Introduction of the Topic

A thorough examination of a bank's financial statements will reveal important factors to consider before making an investment decision. Investors should be aware of the market cycle and interest rates, as these can have a direct effect on a bank's financial results.

Reasons to choose Ratio Analysis for SBI and HDFC

- It provides clear understanding about the Profitability, Liquidity and Long term Solvency of the firm.
- Ratio Analysis is an efficient way to evaluate the company’s performance and compare it with other similar companies to measure financial stability.
- It is useful to analyze firm’s performance across the period of time. It is time and cost effective.
- A comprehensive method to compare the NPA ratios of both the firms.

Reasons to choose SBI and HDFC bank

- In the current scenario in June, 2020 if we think about the two largest of banks of India one from the private segment and other from the public sector segment, there is no doubt about it being HDFC Bank from the Private sector and SBI from the Public sector looking at their balance sheet, reach and customer base.
- The study will assist in contrasting the public and private sectors in addition to SBI and HDFC

1.2 Introduction to Banking Sector

India is not only the world's largest independent democracy, but it is also a rapidly growing economic powerhouse. No country can have a stable economy without a sound and efficient banking system. Banks play a critical role in a country's economic growth. They collect people's unused savings and make them eligible for investment. They're in the process of granting loans and purchasing investment securities, new demand deposits are also established. Accepting and discounting bills of exchange allows for trade both within and outside the country. Banks also help to improve capital mobility. India's banking system has a long list of notable accomplishments over the last three decades. It is no longer limited to the cities, but has spread to even the most remote parts of the world. This is one of the factors behind India's development. The banking industry is now one of India's most important service industries. The availability of high-quality services is critical to the economy's success. Banks' attention has turned away from customer acquisition to customer retention. The introduction of Information Technology into the banking sector has changed the way people work. The banking sector's policy has undergone radical transformations, various customer-oriented products, such as internet banking, are available. Customer’s workload has been reduced mainly because of ATM providers, telebanking, and electronic payments. The internet's convenience Banking allows a customer to access and manage his bank account without having to go to the bank. 'The Customer's options have been revolutionized by the availability of ATMs and credit/debit cards.

Definition of a Bank

A bank is a financial institution and a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly by loans or indirectly through capital markets. (technofunc.com, 2013)

Types Of Banks:

Banks are classified as Public or Private depending on their ownership.

PUBLIC SECTOR BANKS

Public Sector Banks (PSBs) are a major form of bank in India, in which the Indian government or state governments own a majority stake (i.e. more than 50%). The shares of these banks are traded on stock exchanges. Public sector banks in India include State Bank of India, Bank of Baroda, Bank of Maharashtra, Bank of India and others. (types of banks, 2020)

PRIVATE SECTOR BANKS

Private sector banks are those in which majority of the stake is owned by the bank's shareholders rather than the government. Private sector banks in India include RBL Bank, HDFC Bank, ICICI Bank, Yes Bank, and others. (Private sector Banks)

Indian Banking Sector

The Reserve Bank of India (RBI) claims that India's banking sector is adequately capitalised and controlled. The country's financial and economic standards are far superior to those of any other country on the planet. According to credit, industry, and liquidity risk studies, Indian banks are generally resilient and have fared well during the global downturn. Innovative banking models such as transfers and small finance banks have recently been introduced in the Indian banking industry. The RBI's new initiatives may go a long way toward assisting the domestic banking industry's restructuring.

Market Size

The Indian banking system consists of 12 public sector banks, 22 private sector banks, 46 foreign banks, 56 regional rural banks, 1485 urban cooperative banks and 96,000 rural cooperative banks in addition to cooperative credit institutions. As of September 2020, the total number of ATMs in India increased to 210,049 and is further expected to increase to 407,000 by 2021. (banking sector in India, 2021)

NON PERFORMING ASSESTS OFA BANK

Definition: A non performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days. (definition of NPAs)

<u>Types of NPAs</u>

Standard Assets:

This is a type of performing asset that generates a steady stream of income and repayments as they become due. These assets have a normal risk profile and are not NPAs in the traditional sense. As a result, standard properties do not need any special requirements.

Sub-Standard Asset:

These include loans and advances that have been classified as nonperforming assets for more than a year.

Doubtful Assets:

These are assets that have been deemed non-performing for a duration of more than 12 months.

Loss Assets:

These are the assets that the lending institutions are unable to recover. (What is NPA and Types of NPA, 2020)

Road Ahead

Increased infrastructure investment, faster project delivery, and the continuation of reforms are expected to give the banking sector a boost. All of these factors point to a strong future for India's banking sector, as rapidly expanding companies will turn to banks for credit.

In addition, technological advancements have pushed mobile and internet banking to the forefront. The banking industry is putting a greater focus on delivering better services to customers and improving their technology infrastructure in order to boost the overall customer experience and offer banks a competitive advantage.

1.3 SBI and HDFC bank

About HDFC Bank

The Housing Development Finance Corporation Limited (HDFC) Bank is an Indian banking and financial services company, headquartered in Mumbai, Maharashtra. HDFC Bank is India's largest private sector bank by assets and by market capitalization as of April 2021. It is the third largest company by market capitalization on the Indian stock exchanges.

The HDFC Bank Preferred program for high net worth individuals-

The **HDFC Bank Plus** and The **Investment Advisory Services program** have been designed keeping in mind needs of customers who seek distinct financial solutions, information and advice on various investment avenues. The Bank also has a wide array of retail loan products including Auto Loans, Loans against marketable securities,

History

HDFC Bank, a subsidiary of the Housing Development Finance Corporation, was established in 1994 and is headquartered in Mumbai, Maharashtra, India. Manmohan Singh, the Union Finance Minister, inaugurated the company's first corporate office and a full-service branch at Sandoz House in Worli.

Market Reach

The Bank's distribution network had 5,500 branches in 2,764 cities as of 30 June 2019. In fiscal year 2017, the bank also constructed 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 staff.

Products and Services Offered

Wholesale banking, retail banking, treasury, auto loans, two-wheeler loans, personal loans, loans against land, consumer durable loan, lifestyle loan, and credit cards are among the products and 12 services offered by HDFC Bank. Payzapp and SmartBUY are two other digital products available.

About SBI

STATE BANK OF INDIA is a regulatory body for public sector banking and financial services in India, based in Mumbai, Maharashtra. SBI is world's 43rd largest bank and the only Indian bank on the Fortune Global 500 list of the world's largest companies for 2020, ranking 221st. [eight] It is India's largest public sector bank, with a 23 percent asset market share and a 25 percent share of the overall loan and deposit market.

History

The Imperial Bank of India was established when the Bank of Calcutta and the Bank of Bombay merged to create the Imperial Bank of India, which later became the State Bank of India in 1955. In 1955, the Indian government took control of the Imperial Bank of India, with the Reserve Bank of India (India's central bank) owning a 60% stake and renaming the bank State Bank of India. (State Bank of India)

Market Reach

SBI is one of the largest employers in the country with 209,567 employees as on 31 March 2017, out of which 23% were female employees and 3,179 (1.5%) were employees with disabilities. On the same date, SBI had 37,875 Scheduled Castes (18%), 17,069 Scheduled Tribes (8.1%) and 39,709 Other Backward Classes (18.9%) employees.

National

In India, SBI has over 24000 branches. Its revenue in the financial year 2012–13 was 2.005 trillion (US$28 billion), with domestic operations accounting for 95.35 percent of revenue. In the same financial year, domestic activities accounted for 88.37 percent of overall earnings.

SBI organized 11,300 camps and opened over 3 million accounts by September under the Pradhan Mantri Jan Dhan Yojana, which was launched by the government in August 2014 and included 2.1 million accounts in rural areas and 1.57 million accounts in urban areas.

International

As of 2014-15, the bank had 191 overseas offices in 36 countries making it the Indian bank with the highest presence in international markets. (State Bank of India)

Products and Services Offered

SBI offers a plethora of products and services such as savings account, credit cards, fixed deposits, personal loan, home loan, business loan, debit card, loan against property, car loan, gold loan, mudra loan and more. (State Bank of India, 2020)

1.4 Justification of the Topic

Ratio analysis is an effective way to evaluate the financial results of the company to gauge performance. It provides clear understanding about the Profitability, Liquidity and Long term Solvency of the firm. It will also aid in the comparison of both the banks as well as the subsequent changes in liquidity, profitability and NPA position over the last years. Ratio analysis is the finest method to compare the firm's performance across the period of time. Hence the researcher has chosen the ratio analysis for comparing the SBI (largest public sector bank) and HDFC Bank. (largest private sector bank).

1. **Ownership and Background**
   - **SBI:** Public Sector Bank, government-owned; the largest bank in India by assets.
   - **HDFC Bank:** Private Sector Bank, part of HDFC Group; known for efficiency and customer-centric services.
   - **Justification:** Ownership impacts governance, decision-making speed, and policy flexibility.

2. **Market Share and Size**

   Compare:

   - Total assets
   - Branch network
   - ATM network
   - Number of customers

   Justification: Indicates outreach, market penetration, and dominance in the sector.

3. **Financial Performance**

   Compare:

   - Net Profit
   - Net Interest Margin (NIM)
   - Return on Assets (ROA)
   - Return on Equity (ROE)

   Justification: These show profitability, efficiency, and financial health

4. **Loan and Deposit Growth**

   Compare:

   a. Advances (loan book size)
   b. Deposits
   c. CASA Ratio (Current Account Saving Account)

   Justification: Growth in core banking activities shows customer trust and bank's expansion strength.

5. **Asset Quality**

   Compare:

   - Gross NPA (Non-Performing Assets)
   - Net NPA
   - Provision Coverage Ratio

   Justification: Indicates credit risk and the quality of the bank’s loan book.

6. **Technology and Innovation**

Compare:

- Mobile banking features
- Internet banking services
- Digital product offerings

Justification: Tech adoption influences customer experience and operational efficiency.

7. **Customer Base and Services**

Compare:

- Customer service quality
- Product diversity (loans, insurance, mutual funds)
- Target segments (retail, corporate, rural)

Justification: Helps understand which bank is better for specific customer needs.

8. **Stock Market Performance (If for Investment Analysis)**

Compare:

- Share price trends
- P/E Ratio
- Dividend yield

Justification: Reflects investor confidence and future growth expectations.

Chapter II

Review Of Literature

International Reviews

Here are several factors that impact the profitability of banks (Sufian & Habibullah, 2010); (Dietrich & Wanzenried, 2011). These factors can be broadly classified as either internal determinants that originate within the firm such as bank size, capital, risk management, expenses management, and diversification (Molyneux & Thornton, 1992); (BODLA & VERMA, 2006) or external determinants that are outside the firm like market concentration, industry size and ownership, inflation, interest rates, money supply and Gross Domestic Product (GDP) (Athanasoglou, Brissimis, & Delis, 2008); (Chirwa, 2003).

The effect of main internal factors on profitability has been studied in a number of studies. (Smirlock & Brown, 1986) investigated the profitability of demand deposits as a feature of total deposits. Demand deposits seemed to have a substantial positive relationship with earnings, according to their results. Loan loss provision and net charge offs had a major negative impact on large bank profitability, according to Miller and Noulas (1997). These findings revealed that asset and liability composition had an effect on net charge-offs. As a result, commercial banks' asset liability portfolio decisions are likely to have an effect on their profitability through net charge-offs. As a result, banks with higher wages and benefits will need higher net interest margins to stay profitable. (S M Miller , A G Noulas, 1997)

(Ganesan, 2001) looked at the profitability of India's public sector banks and discovered that interest costs, interest income, other income, deposits per branch, credit to total assets, and the proportion of priority sector advances were all important determinants of profitability. (ElBannay, 2004) looked into it.

Whether or not investment in information technology infrastructure has an effect on bank profitability in the United Kingdom. The findings revealed that a bank's profitability is influenced by the number of automated teller machines it has built. (BODLA & VERMA, 2006) attempted to define the core determinants of profitability of public sector banks in India, and their findings revealed that non-interest income, operating expenses, provision, and capital are all important factors. Net profits are inextricably linked to contingencies and spread.

(Naceur, S, & Goaied, 2001)found that banks with relatively high capital and overhead expenses have higher net-interest margins and profitability levels in a study of Tunisian banks from 1980 to 2000. They also discovered that the size of a bank has a negative impact on profitability, moreover the stock exchange. Bank profitability increased as a result of the expansion. Furthermore, private banks were discovered to be comparatively more profitable. They are more successful than their government-owned counterparts.

(SUFIAN, 2009) looked at the factorsthat influenced Malaysian domestic and foreign commercial bank profitability from 2000 to 2004. Malaysian banks with higher credit risk and loan concentration have lower profitability rate, according to research. Banks with a higher capitalization ratio, on the other hand, have a higher risk of failure.

High running costs and a high proportion of income from non-interest sources were found to be comparatively more beneficial.

The effect of macroeconomic variables such as concentration, expansion, and inflation on bank profitability is covered by external determinants of bank profitability (Rajan & Zingales, 1998); (Athanasoglou, Brissimis, & Delis, 2008); (Chirwa, 2003) looked into the relationship between market structure and consumer behavior and profitability of Malawi's commercial banks using time series data from 1970 to 1994. The investigation demonstrates a long-term connection between bank performance and concentration.

(SUFIAN, 2009) discovered that economic growth has a negative effect on Malaysian bank profitability. Inflation rates that were higher had a positive effect on the profitability of these banks. (Molyneux & Thornton, 1992) studied a survey of eighteen European countries. and discovered that the return on equity and the level of interest rates have a significant positive relationship on each nation, the concentration of banks, and the ownership of the government.

National Reviews

Avani Ojha and Hemchandra Jha- has conducted studies on the effect of NPAs on the operations of the SBI and PNB using various research methods and analyzed the hypothesis based on the entire study that NPAs play a significant role. Non-performing assets have a significant effect on bank profitability because they are closely linked to efficiency. The profitability and asset liability management of Indian banks. NPAs are the product of advances not being recovered or not being recovered within a certain time frame for a given type of lending. They suggest that banks analyze NPAs on a regular basis, by intent, borrower, country, and so on. Before sanctioning, there should be methods and proper inspections of the creditors. (Ojha & Jha, 2018).

Dr. Ganesan and R. Santhanakrishnan has conducted a report on NPAs at the State Bank of India from 2002-03 to 2011-12 with the aim of deploying capital, analyzing gross NPAs, investigating the effects of NPAs, and recommending steps to monitor NPAs. They calculated the averages and standard deviations to test the hypothesis, and the results were based on the desired outcomes. They put the hypothesis to the test by estimating averages and standard deviations, and then comparing the results to the desired outcomes. They discovered that the banking industry has changed dramatically since the first phase of economic liberalization, and that credit management has become increasingly important as a result. NPAs has increased with economic growth and aggressive lending practices. (Santhankrishnan & Ganesan, 2013)

Manisha Raj, Aashita Jain, Shruti Bansal, and Tanya Verma conducted a report on non- performing assets (NPAs) and conducted a "A comparative study of SBI and ICICI Bank from 2014-17." They primarily conducted a report on nonperforming assets (NPAs) to examine the pattern of NPAs at State Bank of India and ICICI Bank over a four-year period from 2014 to 2017. They also compared overall advances, net benefit, gross NPAs, and net NP from table to table. They looked for a linear relationship between net profit and net NPAs in both banks during the research. After conducting research, they came to the conclusion that managing nonperforming assets (NPAs) is a difficult challenge for any bank in the banking industry. After analyzing the data for the given years, it appears that the biggest problem for both banks in terms of liquidity is that NPAs have increased while profitability has decreased. Despite the fact that SBI has a higher NPA ratio than ICICI Bank.

Since SBI is a public sector bank, it is more vulnerable to losing money if it extends loans to the general public. In the case of ICICI Bank, their investigation discovered that no significant benefit or loss has been reported, but that NPAs are periodically settled against the bank's profitability. In the event that SBI's condition worsens as a result of rising NPAs. (RAJ, Jain, Bansal, & Verma, 2018)

Swathi.M.S. and Sridhar.K. conducted a study of non-performing assets from 2007 to 2013 and analyzed the methods for resolving NPAs for public sector banks, private sector banks, and other types of banks. To conclude the analysis, they mostly relied on secondary data released by banks at the end of each quarter and year, as well as the RBI annual reports. They have taken the net and gross Non-Performing Assets to assess and find the facts and figures in the analysis using data derived from secondary sources. They investigated the causes and factors that influence NPAs. Willful defaults by customers of various banks is the key cause, according to the central light. Other factors they discovered during the study included lenient lending norms, industrial crises, fund diversification, higher debt and borrowing costs, and a sudden stock market downturn. Lok Adalat, enactment of the SARFAESI Act, Asset Reconstruction Company, corporate debt restructuring, and other solutions are also suggested by them to solve the problems. (Swathi.M.S & Sridhar., 2019)

The first mention of bankers is that of the 'Shroffs,' 'Seths,' 'Sahukars,' 'Mahajans,' and 'Chettis,' who were doing similar work in the past. In her article on the history of banking, Srivastava (2001) mentions the presence of these early forms of bankers.

'Indian Banking History' is a book about the history of Indian banking. She goes on to say that these small businesses were run by indigenous bankers. Their activities ranged from small money lenders to Shroffs with massive conglomerates Corporations they ran are much bigger and more specialized company than they did before even greater than an ordinary bank. (Shrivastava, 2001)

Tiwari (1959) investigated the growth and development of the Indian banking system. He claims that Allahabad Bank (founded in 1865) was the first bank owned entirely by Indians, followed by Punjab National Bank (1894). A large number of other banks like Bank of India, Central Bank of India, and other Indian banks were founded between 1906 and 1913. Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore are some of the most well-known banks in India. (Tiwari, 1959)

The performance of public sector banks has declined dramatically since nationalization, with more than half of them having a negative net worth. Recognizing that a sound banking system is essential for any country's growth, the 'Banking Sector Reforms' were introduced by the government at the time. The first move was to set up a committee to implement the banking reforms.

The Narasimham Committee was established in 1989 to implement these reforms. In 1991, the Committee issued its first report, which included recommendations such as lowering the Statutory Liquidity Ratio (SLR) to 25% over a five-year period and gradually lowering the SLR.

CRR (Cash Reserve Ratio) of 3-5 percent. It also suggested that guided credit be phased out. Programs and a re-definition of the priority field are in the works. The prohibition on estabilishing new private banks. Branch licensing was also abolished, according to the Narasimham Committee Report.

In 1991, The committee's second report, released in 1998, recommended that the two organizations be merged. Banks in the public sector that are strong and those that are poor are being closed. The committee also promoted a healthy rivalry between public and private sector banks by recommending the Golden Handshake Scheme. (Arora, 2017).

Following the Narasimham Committee's recommendations, the profitability and growth of Indian banks improved significantly. Deposits as a percentage of GDP increased from 48.6% in 1990 to 60.4 percent in 2010. In 2002, the credit rating rose from 29.5 percent to 39 percent. (Radha, 2003)

According to Malayadri and Sirisha (2011), in their paper titled "A Comparative Study of NonPerforming Assets in Indian Banking Industry," there has been a rise in advances and a decrease in the NPA ratio in both public and private sector banks, resulting in improved financial performance. Quality of the asset They also came to the conclusion that the banks' NPA management had improved as a result of the study. The regulatory authorities implemented prudential standards and measures. (Malayadri, Sirisha, & Pacha, 2011)

In their paper titled "NPAs Reduction Strategies for Commercial Banks in India," Prasad and Veena (2011) reported that NPAs have a negative effect on the ROA because they do not produce any net interest income. As a result, bank profits are reduced, and recycling of waste is limited. (Bhavani, G.V., Veena, & D, 2011)

The NPAs study comparing public and private sector banks was conducted by Kajal Chaudhari and Monika Sharma in June 2011. To detect any diversion of funds, effective and regular followup of the end usage of the funds sanctioned is needed. This procedure can be repeated every quarter to ensure that any accounts that become NPA are properly accounted for. (Chaudhari & Sharma, 2011)

PROF. SIRAJ. K. K & SIRAJ. K. K (DR). NPA, according to P. SUDARSANAN PILLAI (February 2014), is a virus that has infected the banking sector. It has an effect on liquidity and profitability, as well as posing a challenge to asset quality and bank survival. The study concluded that nonperforming assets (NPAs) continue to be a major danger, and the incremental aspect explained by NPA additions raises serious doubts about the efficiency of Indian banks' credit risk management. (PILLAI & K.K, 2012)

Chetan Dudhe (August 2017) discovered a connection between gross nonperforming assets and net profit. Every country has a problem with nonperforming loans, and financial institutionsshould devise new strategies to boost loan recovery. Non-performing assets (NPAs) are impacting financial institutions' financial and psychological results. (Dudhe, 2017)

Chapter III

Research Methodology

Objectives of the Study

- To compare and evaluate the financial performance of SBI and HDFC Bank.
- To understand and compare the trends of NPA of both the banks over the last three years.
- To ascertain yearly fluctuations in terms of profitability, liquidity and efficiency of SBI and HDFC Bank.

Research Hypothesis

Ho1 = there is no significant relationship between the gross NPA ratio of SBI and HDFC over the last three years.

Ho2 = there is no significant relationship between the net NPA ratio of SBI and HDFC over the last three years.

Scope of the Study

In the present study, an attempt has been made to measure, evaluate and compare the financial performance of SBI and HDFC. The study is based on secondary data that has been collected through annual reports of the respected banks, websites, journals, documents and other published information. The study covers the period of 3 years i.e. is from year 2017-18, 2018-19 and 201920. Ratio analysis was applied to analyze and compare the trends in financial performance. Mean and t test have also been deployed to analyze the trends in banking profitability.

Research Design

- DURATION OF STUDY- The period of this study will cover last 3 years of the financial data- 2017-18, 2018-19, 2019-20.
- DATA COLLECTION PROCEDURE- Secondary Data will be used in this study to compare the financial statements of both the banks over the last three years.
- DATA COLLECTION METHODS- Data has been collected through Ratio Analysis.

- STATISTICAL TOOLS AND TESTS USED- The statistical tool used in the study is Mean and inferential statistic T-test has been conducted to know the significant relation between the NPA Ratios of both the banks.

Limitations of the Study

The study is confined only to the selected and restricted indicators and the study is confined only for a period of three years.

- As the analysis is entirely based on secondary data, it has its drawbacks, firms can cheat and window dress their financial statements.
- Ratio analysis metrics do not necessarily represent future performance of the company.

Chapter IV

Data Representative & Interpretation

Data Representation and Interpretation

Ratio analysis of SBI and HDFC bank from its annual reports for the year 2017-18, 2018-19 and 2019-20 is presented below:

NON PERFORMING ASSETS RATIOS

NON-PERFORMING ASSETS (NPA) are assets for which interest is overdue for more than 90 days. It includes:-

Gross non performing asset ratio

Gross non-performing assets- Gross non-performing assets refer to the total amount of the debts that an organization has failed to collect or the people owing the organization has failed to honor their contractual obligations of paying both the principal and interest amount.

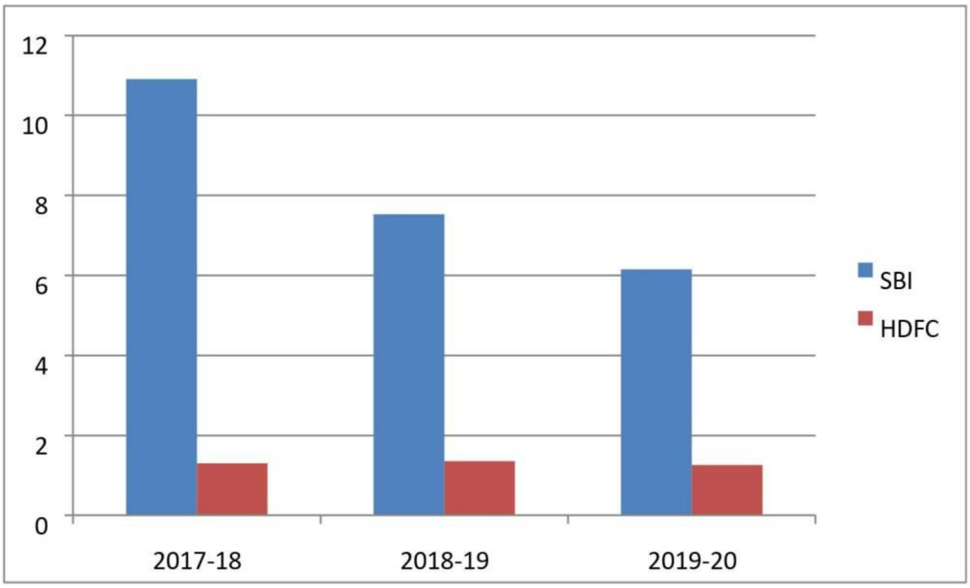
Gross non-performing loans are the sum of all the loans that have been defaulted by the individuals who have acquired loans from the financial institution. This means that all loans defaulted are added together to form gross non-performing assets.

Formula:-

Gross NPA Ratio= (A1 + A2 + A3 .... + An)/Gross Advances (A1 stands for loans given to person number one, A2 for loans given to person number two etc.

Year	SBI	HDFC
2017-18	10.91	1.30
2018-19	7.53	1.36
2019-20	6.15	1.26
Average	8.19	1.30

(Table 1 shows the % of Gross NPA of SBI and HDFC for last three years)



(Graph 1 shows the % of Gross NPAs of SBI and HDFC for last three years)

Interpretation: The gross NPA ratio of SBI stood at 10.91 in 2017-18 while that of HDFC was 1.30 in the same year. In 2018-19 the ratio of SBI dropped down to 7.53 and that of HDFC increased to 1.36. In the year 2019-20 the ratio of SBI further dropped down to 6.15 while that of HDFC was 1.26.

So the average Gross NPA ratio of SBI stood at 8.19 while that of HDFC was much lesser at 1.30, which clearly shows that SBI's asset quality is in very poor shape.

NET NON PERFORMING ASSESTS RATIO

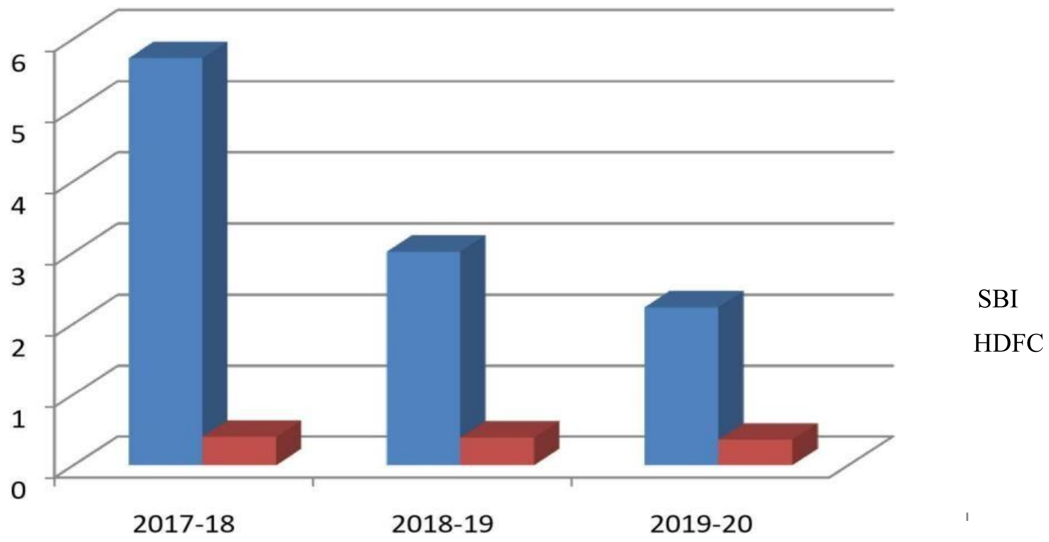
Net non-performing assets are the amount that isrealized after provision amount has been deducted from the gross non-performing assets. It is the actual loss that the organization incurs after loan defaults.

Formula:-

Net NPA Ratio = (Total Gross NPA) – (Provision for Unpaid Debts)/Gross Advances

Year	SBI	HDFC
2017-18	573	0.40
2018-19	3.01	0.39
2019-20	2.23	0.36
Average	3.65	0.38

(Table 2 shows the % of Net NPA of SBI and HDFC for last three years)



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Interpretation: In the year 2017-18, the Net NPA ratio of SBI stood at 5.73 while that of HDFC was much lesser i.e. 0.40. In year 2018-19, the ratio of SBI further dropped to 3.01 and that of HDFC was at 0.39. In 2019-20, the ratio again dropped to 2.23 and 0.36 respectively, which shows the Net NPAs gradually started decreasing.

The average gross NPA ratio of SBI was at 3.65 and that of HDFC was at 0.38. Therefore it shows that HDFC has better overall financial health and it is better than SBI in managing their net NPAs.

Efficiency Ratios

Efficiency ratios measure a company's ability to use its assets and manage its liabilities effectively in the current period or in the short-term. These ratios measure how efficiently a company uses its assets to generate revenues and its ability to manage those assets. The efficiency ratio of a bank can be used to determine how efficient a bank is. This reveals the financial health of the institution.

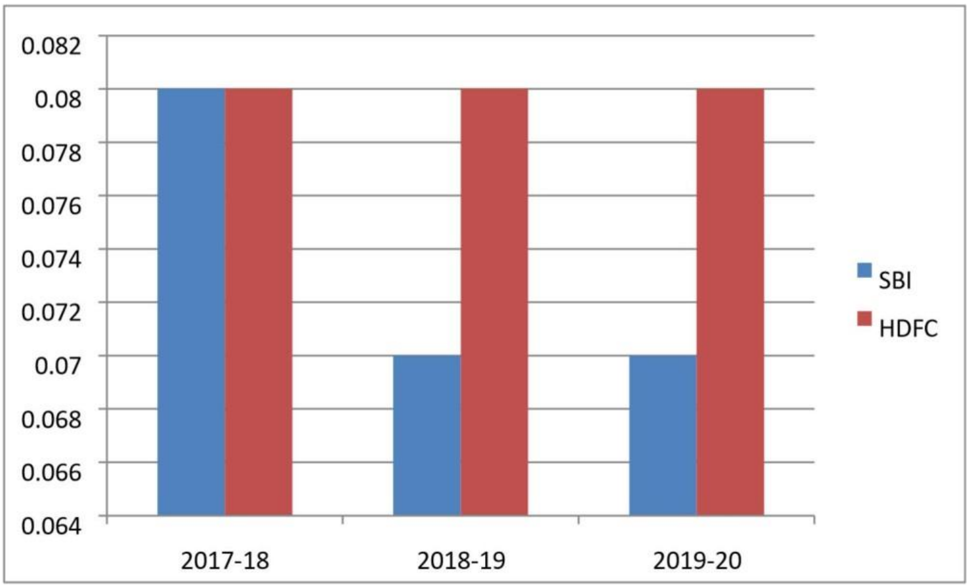
Fixed Asset Turnover Ratio

Fixed-asset turnover ratio is a type of efficiency ratio that measures sales to the value of fixed assets. It indicates how well the business is using its fixed assets to generate sales. Generally, a high fixed assets turnover ratio indicates better utilization of fixed assets and a low ratio means inefficient or under-utilization of fixed assets.

Fixed Asset Turnover Ratio = Net Sales/ Average Fixed Assets

Year	SBI	HDFC
2017-18	0.08	0.08
2018-19	0.07	0.08
2019-20	0.07	0.08
Average	0.07	0.08

(Table 3 showing Fixed Asset Turnover Ratio of SBI and HDFC for the last three years)



(Graph 3 showing Fixed Asset Turnover Ratio of SBI and HDFC for the last three years)

Interpretation: The fixed asset turnover ratio of both SBI and HDFC stood at 0.08 in the year 2017- 18, in 2018-19, the ratio of SBI was at 0.07 while that of HDFC remained same at 0.08. In 201920, the ratio again remained same as 0.07 and 0.08 respectively.

The average Fixed Assets Turnover ratio of SBI was 0.07 and that of HDFC was 0.08 which shows that both the banks are inefficiently using their fixed assets.

Leverage Financial Ratios

Leverage ratios measure the amount of capital that comes from debt. In other words, leverage financial ratios are used to evaluate a company's debt level.

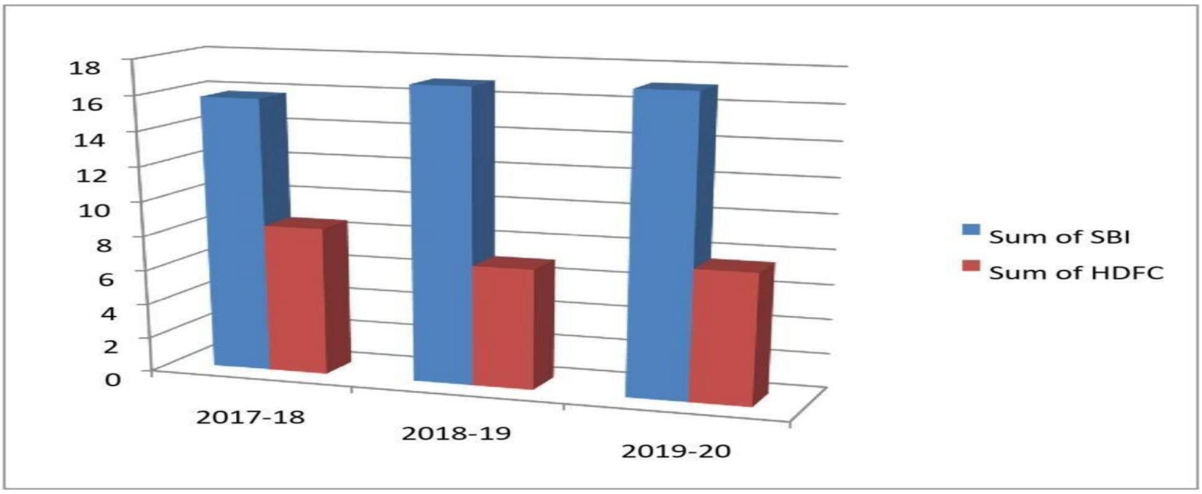
Debt to Equity Ratio

The debt to equity ratio is a type of leverage ratio that calculates the weight of total debt and financial liabilities against shareholders' equity. The ideal debt to equity ratio is 2:1 (because the cost of debt is lower than the cost of equity.)

Debt to equity ratio = Total liabilities / Shareholder's equity

Year	SBI	HDFC
2017-18	15.79	8.58
2018-19	16.89	6.97
2019-20	17.08	7.56
Average	16.59	7.70

(Table 4 showing Debt to Equity Ratio of SBI and HDFC for the last three years



(Graph 4 showing Debt to Equity Ratio of SBI and HDFC for the last three years)

Interpretation: In the year 2017-18, the debt to equity ratio of SBI is very high at 15.79 and that of HDFC is 8.58. In 2018-19, the DER of SBI increased to 16.89 while that of HDFC decreased to 6.97. Lastly in 2019-20, the ratio further increased to 17.08 and 7.56 respectively.

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The average debt to equity of SBI stood at 16.59 and that of HDFC stood at 7.70. It suggests that SBI is at higher default risk than HDFC and both of the banks are financing a significant amount of their potential growth through borrowing.

Profitability Ratios

Profitability ratios measure a company's ability to generate income relative to revenue, balance sheet assets, operating costs, and equity. Common profitability financial ratios include the following:

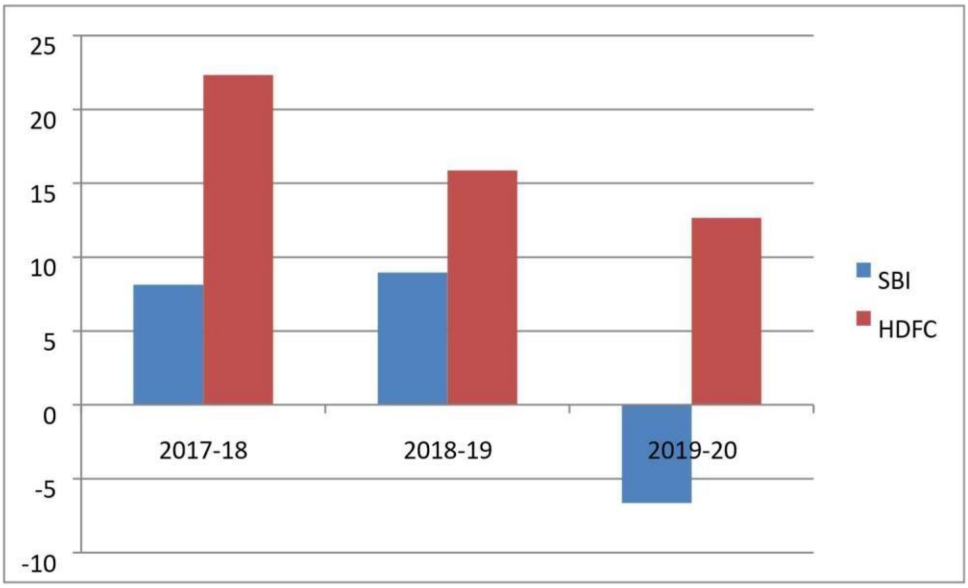
Operating Profit Ratio

Operating profit ratio is a profitability or performance ratio that compares the operating income of a company to its net sales to determine operating efficiency.

Operating Profit Ratio = Operating income / Net sales

Year	SBI	HDFC
2017-18	8.14	22.33
2018-19	8.95	15.87
2019-20	-6.65	12.66
Average	3.48	16.95

(Table 5 showing Operating Profit Ratio of SBI and HDFC for the last three year)



(Graph 5 showing Operating Profit Ratio of SBI and HDFC for the last three years)

Interpretation: In 2017-18, the operating profit ratio of SBI is 8.14 and that of HDFC is much higher at 22.33. In the year 2018-19, the ratio of SBI stood at 8.95 and that of HDFC at 15.87. In 201920, SBI had a negative operating profit ratio which shows its overhead costs are too high and they can only survive as long as their cash reserves will allow. If they begin to run out of cash in hand, they may have to sell assets in order to cover their expenses and remain in operation.

The average operating profit ratio of SBI student 3.48 and that of HDFC stood at 16.95 which suggest that SBI has low operating profit margin while HDFC has very high operating profit margin.

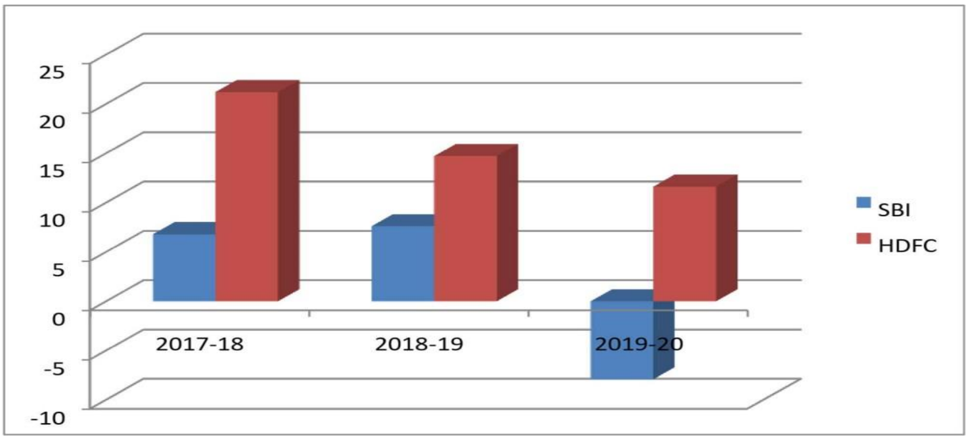
Gross Profit Ratio

The gross profit ratio compares the gross profit of a company to its net sales to show how much profit a company makes after paying its cost of goods sold.

Gross Profit Ratio = Gross profit / Net sales

Year	SBI	HDFC
2017-18	6.81	21.20
2018-19	7.62	14.72
2019-20	-7.93	11.62
Average	2.16	15.84

(Table 6 showing Gross Profit Ratio of SBI and HDFC for the last three years)



(Graph 6 showing Gross Profit Ratio of SBI and HDFC for the last three years)

Interpretation: In 2017-18, the gross profit ratio of SBI stood at 6.81 while that of HDFC stood at 21.20. In 2018-19, ratio of SBI increased to 7.62 while that of HDFC decreased to 14.72. In 201920 SBI had a negative gross profit ratio of -7.93 which shows that the sales are not enough to cover the costs incurred to manufacture the goods or provide the services.

The average gross profit ratio of SBI stood at 2.16 while that of HDFC was much higher at 15.84 and it suggests that HDFC is successfully producing profits over and above cost.

Net Profit Ratio

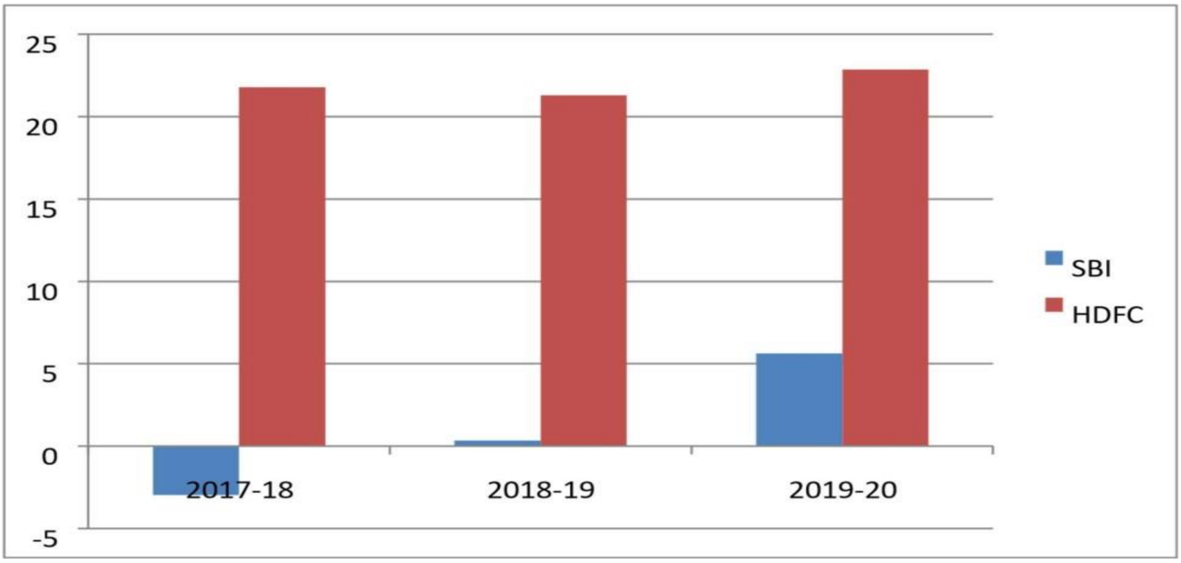
Also known as Net Profit Margin ratio, it establishes a relationship between net profit earned and net revenue generated from operations (net sales). Net profit ratio is a profitability ratio which is expressed as a percentage hence it is multiplied by 100.

NP ratio helps to determine the overall efficiency of the business' operations, furthermore, it is an indicator of how well a company's trading activities are performing.

Net Profit Ratio = (Net profit ÷ Net sales) x 100

Year	SBI	HDFC
2017-18	-2.96	21.79
2018-19	0.35	21.29
2019-20	0.35	22.86
Average	1	22

(Table 7 showing Net Profit Ratio of SBI and HDFC for the last three years)



(Graph 7 showing Net Profit Ratio of SBI and HDFC for the last three years)

Interpretation: The net profit ratio of SBI stood at -2.96 at while that of HDFC stood at 21.79 in 2018-19 the ratio of SBI was at 0.35 while that of HDFC was at 21.29. In 2019-20 the net profit ratio of SBI increased to 5.63 while that of HDFC increase to 22.86.

The average net profit ratio of SBI stood at 1 while that of HDFC stood at 22 which show that SBI is making less money than it is spending and HDFC's overall efficiency is quite good.

Liquidity Ratios

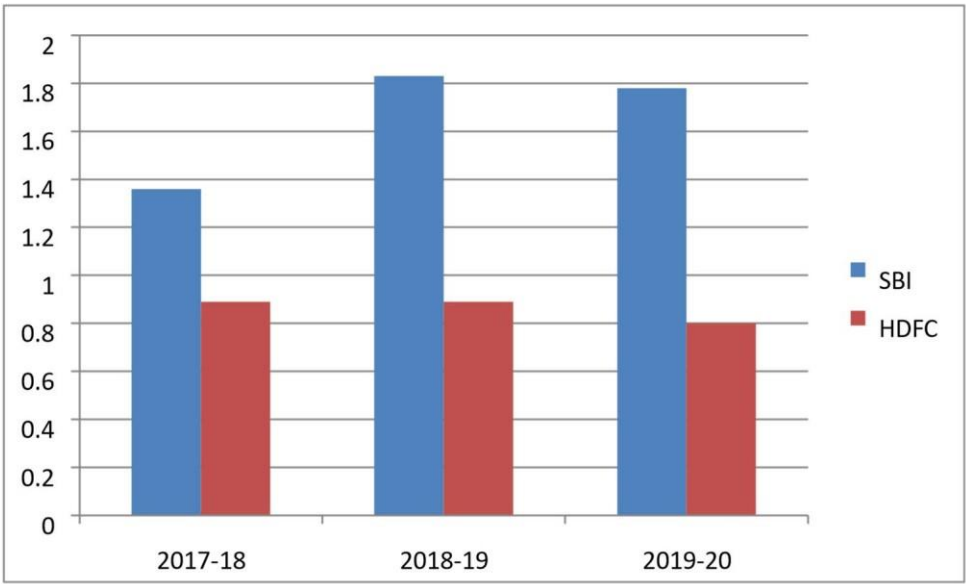
Liquidity ratios are financial ratios that measure a company’s ability to repay both short- and longterm obligations. Common liquidity ratios include the following:

Current Ratio

Year	SBI	HDFC
2017-18	1.36	0.89
2018-19	1.83	0.89

2019-20	1.78	0.80
Average	1.66	0.86

(Table 8 showing Current Ratio of SBI and HDFC for the last three years)



(Graph 8 showing Current Ratios of SBI and HDFC for the last three years)

Interpretation: In 2017-18 the current ratio of SBI stood as 1.36 and that of HDFC stood at 0.89. In 2019-20, the ratio of SBI was 1.83 and that of HDFC was 0.89. In 2019-20, the ratio stood at 1.78 and 0.80 respectively.

The average of current assets ratio of SBI was 1.66 and that of HDFC was at 0.86 which shows that SBI is more capable in paying its short term obligations.

4.2 Hypothesis Testing

T-test atsignificance level of 0.05 was used to analyze the financial performance of SBI and HDFC bank.

Ho1 = there is no significant relationship between the gross NPA ratio of SBI and HDFC over the last three years.

	SBI	HDFC
Mean	3.656667	0.383333
Variance	3.376133	0.000433
Observations	3	3
Pooled Variance	1.688283	

Hypothesized Mean Difference	0	
df	4	
T Stat	3.085412	
P(T<=t) one-tail	0.018369	
t Critical one-tail	2.131847	
P(T<=t) two-tail	0.036738	
t Critical two-tail	2.776445	

RESULT: A two sample t test assuming equal variances was conducted to check if there was significant difference between the gross NPA ratio of SBI and HDFC bank over the last three years.

There was statistically significant difference between the average gross NPA ratios of SBI and HDFC bank. Since p<0.05(p=0.03), H01 is rejected and therefore we it is proved that **there is significant relationship between the gross NPA ratio of SBI and HDFC bank over the last three years.**

Ho2 = there is no significant relationship between the net NPA ratio of SBI and HDFC over the last three years.

	SBI	HDFC
Mean	8.196667	1.306667
Variance	5.997733	0.002533
Observaions	3	3
Pooled	3.000133	
Hypothesized mean Difference	0	
df	4	
T Stat	4.871857	
P(T<=t) one-tail	0.004104	
t Critical one-tail	2.131847	
P(T<=t) two-tail	0.008209	
t Critical two-tail	2.776445	

RESULT: A two sample t test assuming equal variances was conducted to check if there was significant difference between the net NPA ratio of SBI and HDFC bank over the last three years. There was statistically significant difference between the average net NPA ratios of SBI and HDFC bank. Since $p<0.05 (p=0.008)$, H02 is rejected and therefore we it is proved that there is significant relationship between the net NPA ratio of SBI and HDFC bank over the last three years.

Chapter V

Results & Discussions

Major Findings

1. **NPA Ratios-** From graph 1 and graph 2 it is clear that over the last three years, NPAs of SBI are far more than that of HDFC which clearly shows that asset quality and overall financial health of SBI is in poor shape. Among the last three years 2017-18 has been proved to the worst year for SBI with highest NPA ratios and HDFC had highest gross and net NPA ratios in 2018-19 and 2017-18 respectively.
2. **Efficiency Ratios-** Fixed Assets Turnover ratio-From table and graph no. 3 it is found that the average fixed asset turnover ratios of SBI and HDFC were almost same during the last 3 years which shows that both the banks were inefficiently using their fixed assets.
3. **Leverage Ratios-** Debt to equity ratio- It is used to evaluate a company's debt level which is not satisfactory of both the banks. The average debt equity of SBI stood at 16.59 and that of HDFC stood at 7.70 which shows that SBI is at higher default risk than HDFC. Among the last three years it is observed that SBI had highest debt in 2019-20 whereas HDFC had the highest in 2017-18.
4. **Profitability Ratios** -Operating Profit ratio- Further in graph 5 it is clear that the operating profit ratio of SBI is very less while that of HDFC is completely satisfactory which shows that the company is making enough money from its ongoing operations to pay for its variable costs as well as its fixed costs.
5. **Gross Profit ratio**- Graph 6 shows that gross profit ratio of SBI is again very less than that of HDFC over the last three years. SBI had a negative gross profit ratio of -7.93 in the year 2019-20 issues that the sales and not enough to cover the cost incurred in manufacturing activities. But in the same year HDFC's GP ratio was highest which shows the company has more cash to pay for indirect and other costs such as interest raph 7 show that the net profit ratio of SBI is less than that of HDFC over the last 3 years which shows that HDFC's overall efficiency is better.
6. **Net Profit Ratio-** Graph 8 shows that current ratio of SBI is better than that of HDFC which shows that SBI is more capable in paying it's short term obligations. 40 Among the last 3 years 2018-19 has proved to be the best year for both the banks with highest current ratio of SBI at 1.83 and that of HDFC stood at 0.89.
7. Lastly a two sample t test assuming equal variances was conducted to check if there was significant difference between the NPA ratios of SBI and HDFC bank over the last 3 years. In the test the null hypothesis was rejected and therefore it was proved that there was significant difference between the NPA ratios of SBI and HDFC.

Discussions and Suggestions

- As we see, the debt equity ratio of SBI is higher than HDFC so it should try to restructure its debt and NPAs. The borrowings should be reduced to the level that it is not more than 4-5 times of equity. It will decrease their NPAs. Also this will result in better financial health of the companies.
- Banks should limit its huge lending to trusted companies or individuals so that recovery becomes comparatively faster and easier which would consequently result in less NPAs.
- We can increase the gross profit ratio of SBI by generating more revenue by managing the costs of company efficiently. Working on the products and services of the bank and making different changes in little time will increase the revenue.
- Reducing extra operating expenses and direct overhead expenses will increase the profit margin of the Banks.
- The current ratio of HDFC Bank can be improved by-
    - Delaying any capital purchases that would require any cash payments.
    - Looking to see if any term loans can be re-amortized.
    - Selling any capital assets that are not generating a return to the business (use cash to reduce current debt).

Conclusion

After the above study on the comparative analysis of SBI and HDFC it was discovered that both the banks are managing their ratios to the best of their abilities within the specified parameters. However, when we compare the two banks, it appears that HDFC Bank has an edge over SBI, reason being HDFC Bank have lower NPAs than the SBI. HDFC Bank having average Gross NPAs less than 1.5% while SBI having the GNPAs near about 8.1% as per the annual report of both banks over the last three years.

HDFC Bank has managed their NPA and profitability ratios in a very efficient manner and are playing an important role as a profitable commercial bank, while SBI is controlling its ratios particularly the current assets ratio but is not as competitive in terms of net profit and Non Performing Assets (NPAs).

SBI needs to be more focused on managing the net profits and NPAs part to be a commercially successful bank.

During, the comparative study of SBI v/s HDFC Bank it is found that HDFC Banks has never gone above 2% in net NPAs during the study period while SBI has never gone below 6% during the study period.

This is an eye-opening comparison that demonstrates SBI's need to concentrate on acquiring highquality assets, otherwise they will be compromising customers' hard-earned money in the future.

In order to study the trends of NPA, t-Test has been used, the results of which have been shown in the relevant tables. The comparative analysis of the profitability of the two banks clearly reveals that there is no significant relation between the NPA ratios of both the Banks

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