A

Project report

On

A STUDY ON ASSET LIABILITY MANAGEMENT AT INDIAN BANK

Submitted by

Ms.SONALI DATTARAM SURVE

Under the Guidance of,

DR.GIRISH BODHANKAR

Submitted to

Savitribai Phule Pune University

In the partial fulfillment of the requirement for the award of

Master in business administration (MBA)

Through

Maharashtra Education Society's

Institute of Management & Career Courses, MBA

Batch 2020-22

DECLARATION

I (Name of Student) ---------------------------- of MBA-2 : Seat No ----------hereby declare that the Project work titled--- which has been submitted to University of Pune, is an original work of the undersigned and has not been reproduced from any other source. I further declare that the material obtained from other sources has been duly acknowledged in the report.

Date: Signature:

Place: Name:

ACKONWLEDGEMENT

A word thanks is much less the word encouragement which we have received from people going out of the way to make us feel comfortable & to make the things simple .
I external my profound thanks to our director dr. SANTOSH DESHOANDS for giving me opportunity to undertake this project.
My special thanks & sincere gratitude goes to ore guide for constant guidance & constructive criticism throughout the project.
My sincere thanks goes to Dr. GIRISH BODHANKAR who has motivated us every time and shared the valuable time and provided me with all necessary format.

INDEX

6	Graph showing Earning per equity share from the year 2019 to 2021 6.1.2 bank of baroda 6.2.2 SBI 6.3.2 kotak Mahindra bank 6.4.2 HDFC bank	50-51 52 53 54
7	Graph showing Equity ratio from the year 2019 to 2021 7.1.2 bank of baroda 7.2.2 SBI 7.3.2 kotak Mahindra bank 7.4.2 HDFC bank	55-56 57 58 59

CHAPTER NO.1

INTRODUCTION

INTRODUCTION

This report discusses the Study on Asset Liability Management in Indian bank. Asset-Liability Management (ALM) is one of the vital tool for risk management in banks. The banks have to work properly with regard to the Asset Liability Management so as to increase their performance. Moreover, the function of asset liability management is not just protection from risk. The safety achieved through asset liability management also opens up opportunities for enhancing the net worth.

The Bank was incorporated on 5 march,1907 in Indian companies act. It was nationalied on July 19, 1969.Indian bank is one of the top most public sector in India. Indian bank is an Indian state owned financial services company. The nationalization of fourteen major commercial banks nearly decades ago has completely changed the size and structure of Indian banking system.

Asset liability management is basically a hedging response to the risk in financialvintermediation.it attempts to provide degree of protection to the institution from intermediation risk and makes such risk acceptable form of insurance. It provides the necessary framework to define, measures, monitor, modify and manage these risks. Moreover, the function of asset liability management is not just protection from risk.

The safety achieved through asset liability management also opens up opportunities for enhancing the net worth. the asset liability management can make it possible for an institution to take on position that would have been considered too large in the absence of protection offered by asset liability management.to maximising the risk adjust ted return to shareholders over the long run.

The commercial banking sector plays an important role in mobilization of deposits and disbursement of credit to various sectors of the economy. A sound and efficient banking systemisa   sine qua non for maintaining financial stability. The financial strength of individual banks, which are major participants in the financial system, is the first line of defense against financial risks.

The banking industry in India is undergoing transformation since the beginning of liberalization. Banks in India are venturing into non-traditional areas and generating income through diversified activities other than the core banking activities. There have been new banks, new instruments, new windows, new opportunities and, along with all this, new challenges. While deregulation has opened up new vistas for banks to augment revenues, it has entailed greater competition, reduced margins and consequently greater risks.

Banks enter into off balance sheet (OBS) transactions for extending non-fund based facilities to their clients, balance sheet risk management and generating profits through leveraged positions. OBS exposures of banks, especially public sector banks have witnessed a phenomenal spurt in guarantees, letters of credit, derivatives contracts, etc.

The share of off-balance sheet exposures of SCBs in total liability increased sharply to 333.5 per cent at end-March 2008 from 68.7 percent at end- March 2003. Public sector banks (PSBs), which are perceived to have a low-risk appetite, have the lowest ratio of off-balance sheet exposure to total assets ratio at 61 percent,v Commercial banks witnessed high credit growth in three years in succession staring from the financial year 2005-06.

Although, with deregulation of interest rate and opening of new instruments and products, traditional Asset Liability Management technique has undergone aradical change. Mismatch of Asset and Liability in various ways may affect banks viability. With the recent global turmoil, slowdown in the growth of our economy and rising off balance sheet exposure of the banks, it is very important to explore the interrelation between two sides of the balance sheet, asset account and liability account.

CHAPTER NO.2
LITERATURE REVIEW

1. **Md**. **Salim Uddin**, & **Anamul Haque** (**2016**) There is no underlying fact to ignore the importance of asset-liability management policy to ensure profitability and long-run sustainability of financial institutions in any economy. The study has been conducted to investigate the impacts of ALM policy on the profitability of sample banks working in Bangladesh. The rationality of this study is to observe the degree of relationship of different assets and liability variables with profitability through applying Statistical Cost Accounting (SCA) model using time series data from 2003 to 2014. To identify the relationship among the variables. After analysis, Loans & Advances is found to have a significant positive relationship with banks' profitability.

2. **Dr**. **Anurag b Singh**; **ms**. **Priyanka Tandon** (**2012**) Asset-Liability Management (ALM) is one of the important tools of risk management in commercial banks of India. The banking industry of India is exposed to number of risk prevailed in the market. The research paper discusses about issues in asset liability management.

3. **Mr**. **Chetan Shetty Ms.Pooja Patel** , **Ms**. **Nandini** (**2016**) Assets and Liability Management (ALM) is a systematic and dynamic process of planning, organising, coordinating and controlling the assets and liabilities or in the sense management of balance sheet structure in such a way the net earnings from interest are maximized within the overall risk preference of the banks. This study examined the effect of ALM on the Five Private Sector Banks profitability in Indian financial market by using Gap Analysis and Ratio Analysis Technique. The finding from the study revealed that bank have been exposed to liquidity risk.

4. **Prabhakar** , **Dr**. **S. Mathivannan** , **J**. **Ashok kumar** (**2017**) "**In India asset liability of the banks**" balance sheet of commercial banks posed serious challenges as the banks, which have direct impact on their operations, profitability and efficiency to compete with. The RBI of the country focused and advised banks for taking concrete steps in minimizing the mismatch in the asset-liability management. There had been many positive impacts of various strategies followed by banks in the last one decade.

5. **S**. **P**. **Joshi1 & Dr**. **R**. **V**. **Sontakay** (**2017**) **Asset and Liability Management** (**ALM**) **plays key role in banking and finance industries**. Any bank or financial industry will collapse without the use of ALM tactics. Therefore, to survive in the market, the ALM analysis is carried out timely by these industries to measure the value of risk factors

involved. ALM analysis not only minimizes the risk but also it helps to achieve the financial goals of the industry. In this paper, we present a survey of various ALM techniques reported in the literature, aiming to financial stability. The survey helps for emerging banks to decide the different ALM process used by the banking industries and to select the efficient process out of the reported techniques.

6.   **A Bharath Vajan**, **K.P**. **Tooyamani**, **Vignesh**. **A** (**2017**), in their article "**A Study on Asset liability Management**" then objective of this. study is to study. the asset liability management system and to compare the asset and liability variance, to study the impact of ALM on profitability of the Bank, to identify the asset liability performance of Indian Overseas Bank.

7.   **Prof**. **k Kanhaiyal Singh** (**2013**), " **asset liability management in Bank**". AlD namic Approach". There are series efforts by banks to minimalize the asset liability disparity since the implementation of RBI guidelines7in 1997. Bank's have prepared to lerable follow up and monitoring and preparations at unlike level.

8.   **Dr**. **K.Prince Poul Antony**, **J Manimegalai** (**2014-18**), "**A Study on Asset Liability Management in Indian Bank**", It became the primary focus in the3banking sector, with all the banks trying to maximize performance and reduce their exposure to risk. Asset-liability management is the essential tool for risk management in the banks. The banks have to work correctly with regard to the asset liability management has so increase their performance, assets and liabilities management is crucial for all banks.

9.   **Rauch ET AL**(**2010**), " **An Effect of ALM on the liquidity risk of Commercial Bank**", A study the determinants of liquidity risk and effort to recognize the determinants of liquidity creation, their results emphas is that the most important determinants are macro economic variable and monitory policy, while not showing a important relationship between liquidity creation and bank exact variables such as size and performance.

10. **Ronald J Ryan**, **CFA** (**2013**), "**The Evolution of ALM**", the major objective of this study is the most of the US institution with Assets to advance is to fund some sort of liability, As is the care with the Banks, pension funds, and so forth. As a result ALM should be the investment focus and resource for selecting the core collection.

11. **Kanjana E N** (**2007**), "**An Assessment**. **Asset land Liability**. **Management of Scheduled**. **Commercial Bank in India**", competence profitability land enlargement of scheduled commercial bank in India. Tested whether the establishment expenses was major expenses and out of total expenses which is met by scheduled commercial bank is more due to more number of employees. In here mpiricall study the learning factor and expenses factor which are controllable and non controllable by the Bank.

12. **P.Sheela ,h Tejaswinix Bastray**(**2009**-**2014**), "**Asset**-**Liability Management Comparative Study of at Public and Private Sector Bank**", through the study it was observed that both the banks were exposed to interest rate risk through out the study period. To fill the short term liquidity gap, bank resort to market barrowing shat high rate of interest which was them cause in the reduction of intereste margin and profitability of the Bank.

13. **S.Prabhakar**, **Dr.S.Mathivannan**, **J.Ashok Kumar**(**2017**), " **Asset and Liability Management in Banks**- **A Comparative study on Gap Analysis of SCB in India**". Objective of the study is to compare the sensitive Asset and Liabilities of public sector commercial banks in India.

14. **Mihirk Dash,lK.A.Venkatesh**, **Bhargav.B.D** , "**An Analysis of Assets**-**Liability Management in Indian Banks**". Maturity-gap analysis has a wided range of focus, only as a situation analy is tool, but also a planning tool. Banks need to maintain the maturity gap as low as possible in order to avoid any illiquidity exposure. This would necessarily mean that out flow in different maturity bucket need to be funded from the in flowskin the same bucket.

15. **Md**. **Salim Uddin**, **and Anamul Haque** (**2003**-**2014**), "**The cost and Management**".
There is no underlying fact to ignore the assets and liability policy to ensure profitability
and long term sustainability of financial in stitutions in any economy. The study has been
conducted to investigate the impacts of ALMS policy on the profitability of sample banks
working in Bangladesh. To identify the relationship among the variables.

CHAPTER NO.3
RESEARCH
METHODOLOGY

RESEARCH METHODOLOGY

This research method involves the collection of quantitative data from existing data sources like internet, government resources, research reports etc. The researcher is based on secondary data, with addition information gathered From the finance department. The main sources are bank's previous year's annual reports and schedules and the RBI website.

DATA TYPE

- Secondary data

Annual reports of company are used as the prime source of secondary data. Apart from the annual reports to study the general condition prevailing in the economy publish articles in journals, magazines and internet are used.

SAMPLE SIZE

Sample size denotes the number of elements selected for the study. Following **four** banks has been taken as sample for the purpose of the study.

1. **BANK OF BARODA**
2. **STATE BANK OF INDIA**
3. **KOTAK MAHINDRA BANK**
4. **ICICI BANK**

SAMPLING METHOD

- Selective Sampling

<u>OBJECTIVES</u>

- To study about the management of Assets and Liabilities of the Bank.

- To understand how ALM helps to maintain the liquidity of the firm.

- To know how the ALM improves the effectiveness and performance of Bank.

- To summarize the findings, conclusion and recommend the suggestions on ALM of bank.

SCOPE OF THE STUDY

1. The prime importance of the study is to analyze the maintenance of asset and liability.

2. This study helps in profit planning and growth of the bank and it is also helps in analysis of performance of the Bank based on the past performance and finds weakness in the operation of Bank.

3. The findings of the study can be used as secondary data for the various future study purposes.

LIMITATIONS

1. This data is based on old research paper hence this study cannot predict exact numbers.

2. The published information used in the study may not be accurate and unbiased.

3. Not much information of the company was revealed as the executive personal wanted certain information to be confidential.

4. Only monetary aspects of the company have been taken into consideration.

5. The study is restricted to one profit center of the company, due to the time and geographical constraints.

6. There are more chances that the data may not be accurate.

THEORETICAL BACKGROUND

MEANING OF ASSETS AND LIABILITIES MANAGEMENTI

Asset-liability management is the process For risk management that rise because of the mismatch between assets and liabilities. It involves managing the assets and cash flow to satisfy the various obligations. In which case strives to mitigate or to hedge the risk of not meeting these obligations.

CATEGORIES OF RISK

Risk in a way can be defined as the chance or the probability of loss or damage. In the case of banks, these include credit risk, capital risk, market risk, interest rate risk, and liquidity risk. These categories of financial risk require focus, since financial institutions like banks do have complexities and rapid changes in their operating environments.

- **CREDIT RISK**

 The risk of counter party failure in meeting the payment obligation on the specific date is known as credit risk. Credit risk management is an important challenge for financial institutions and failure on this front may lead to failure of banks. The recent failure of many Japanese banks and

failure of savings and loan associations in the 1980s in the USA are important examples, which provide lessons for others. It may be noted that the willingness to pay, which is measured by the character of the counter party, and the ability to pay need not necessarily go together. The other important issue is contract enforcement in countries like India. Legal reforms are very critical in order to have timely contract enforcement. Delays and loopholes in the legal system significantly affect the ability of the lender to enforce the contract.

- **CAPITAL RISK**

One of the sound aspects of the banking practice is the maintenance of adequate capital on a continuous basis. There are attempts to bring in global norms in this field in order to bring in commonality and standardization in international practices. Capital adequacy also focuses on the weighted average risk of lending and to that extent, banks are in a position to realign their portfolios between more risky and less risky assets.

- **MARKET RISK**

Market risk is related to the financial condition, which results from adverse movement in market prices. This will be more pronounced when financial information has to be provided on a marked-to-market basis since significant fluctuations in asset holdings could adversely affect the balance sheet of banks. In the Indian context, the problem is accentuated because many financial institutions acquire bonds and hold it till maturity. When there is a significant increase in the term structure of interest rates, or violent fluctuations in the rate structure, one finds substantial erosion of the value of the securities held.

- **INTEREST RATE RISK**

Interest risk is the change in prices of bonds that could occur as a changes in the rate of interest. In other words, price as well as reinvestment risks require focus. In so far as the terms for which interest rates were fixed on deposits differed from those for which they fixed on assets, banks incurred interest rate risk i.e., they stood to make gains or losses with every change in the level of interest rates.

- **LIQUIDITY RISK**

Affects many Indian institutions. It is the potential inability to generate adequate cash to cope with a decline in deposits or increase in assets. To a large extent, it is an outcome of the mismatch in the maturity patterns of assets and liabilities.

CHAPTER NO.4
DATA ANALYSIS AND
INTERPRETATION

RATIO ANALYSIS

1. CURRENT RATIO:

The current ratio is a liquidity ratio that measures whether or not a firm has enough resources to meet its short-term obligations. It thinks about an association's present advantages for its present liabilities and is communicated as pursues:

Current ratio =   Current Assets

Current Liabilities

1.1 BANK OF BARODA

TABLE 1.1.1: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

Year	Current Assets (Rs In Cr.)	Current Liabilities (Rs In Cr.)	Ratio
2019	242610.49	91314.59	2.65
2020	369650.22	140074.87	2.63
2021	359476.24	111322.12	3.22

(Source: Annual Reports of Bank of baroda)

GRAPH 1.1.2: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

So we can say that the bank of baroda current assets are increased over a period of time. In the base year 2019 the current ratio of Bank was 2.65. In the year 2020 the current ratio of Bank of baroda has been decreased to 2.63. but in the year 2021 the current ratio of bank of baroda has been increased to 3.22. which shows that the current assets of Bank of baroda has been increased much as compared to base year 2019.
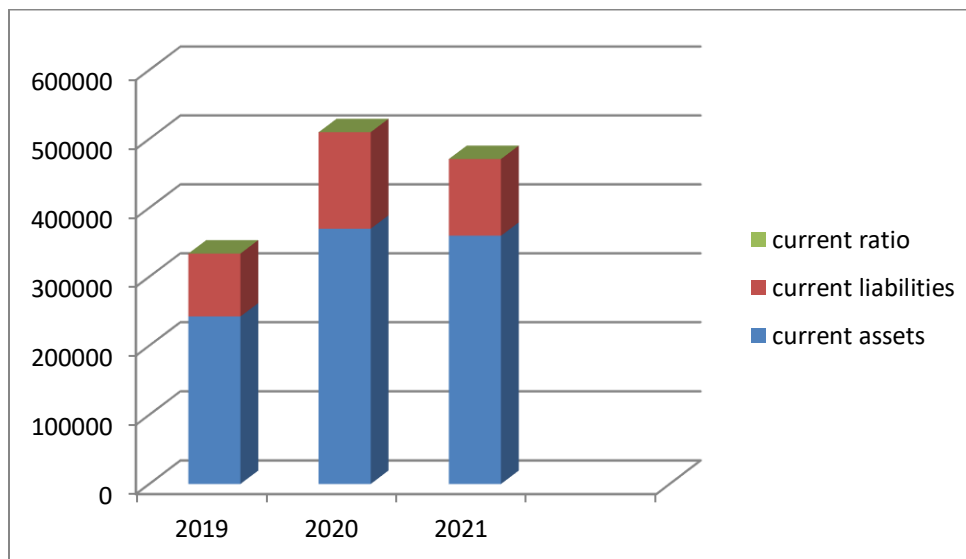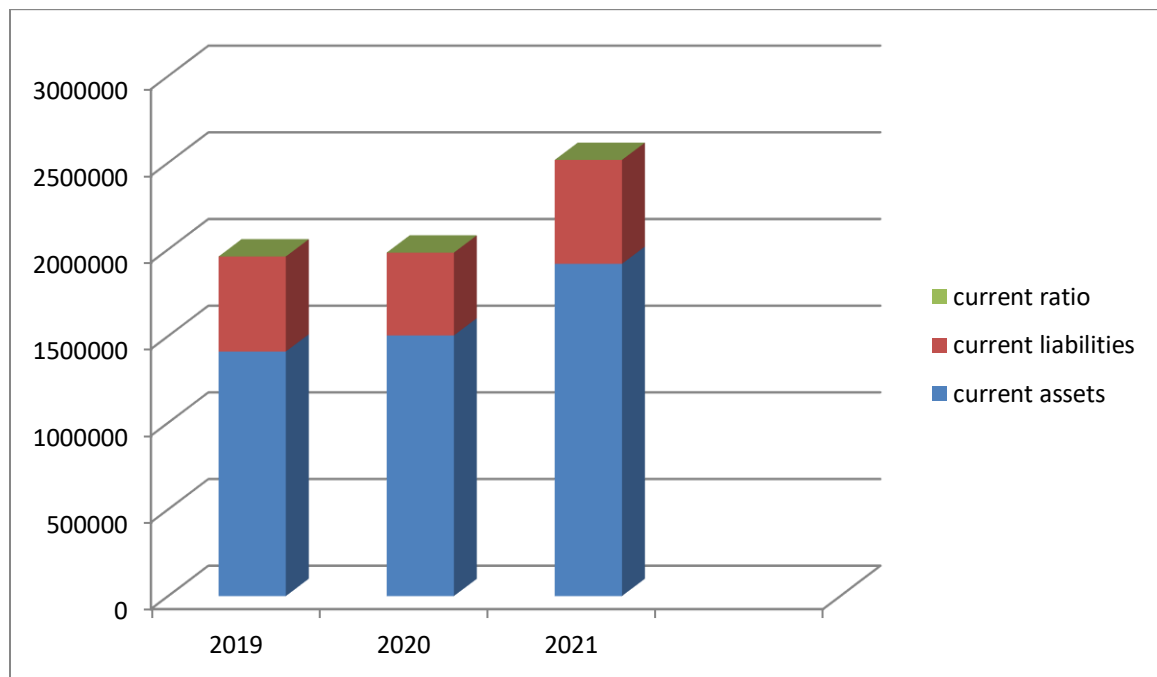
1.2   STATE BANK OF INDIA

TABLE 1.2.1: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

Year	Current Assets (Rs In Cr.)	Current Liabilities (Rs In Cr.)	Ratio
2019	1410282.07	548614.42	2.57
2020	1503303.85	477765.75	3.14
2021	1916675.43	599277.36	3.19

(Source: Annual Reports of SBI)

GRAPH 1.2.2: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

So we can say that the SBI current assets are increased over a period of time. In the base year 2019 the current ratio of SBI was 2.57. In the year 2020 the current ratio of SBI has been in to 3.14. but in the year 2021 the current ratio of SBI has been increased to 3.19.which shows that the current assets of SBI has been increased much as compared to base year 2019.
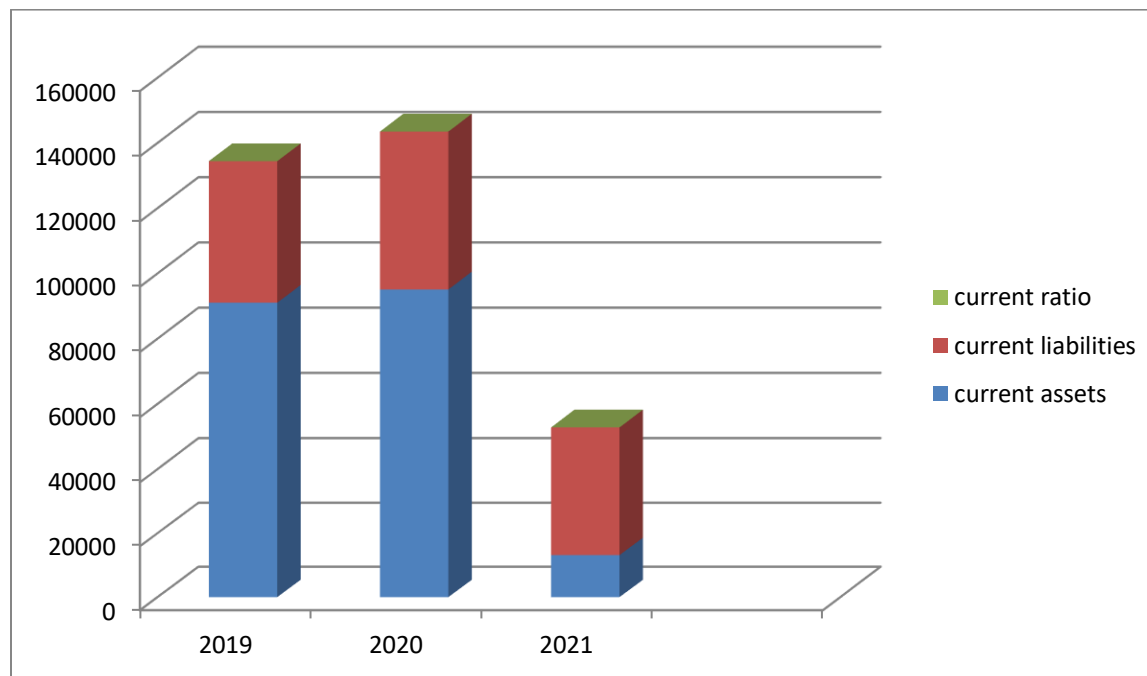
1.3 KOTAK MAHINDRA BANK

TABLE 1.3.1: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

Year	Current Assets (Rs In Cr.)	Current Liabilities (Rs In Cr.)	Ratio
2019	91027.72	43391.27	2.09
2020	95093.12	48412.99	1.96
2021	131131.81	39659.45	3.30

(Source: Annual Reports of kotak Mahindra Bank)

GRAPH 1.3.2.: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

 Table 1.3.1 shows the current ratio for the study period. The company had recorded the increasing and decreasing trend in current ratio during study period. In the base year 2019 the current ratio of bank was 2.09. In the year 2020 the current ratio of kotak Mahindra bank has been in to 1.96. but in the year 2021 the current ratio of kotak Mahindra bank has been increased to 3.30.which shows that the current assets of kotak Mahindra bank has been increased much as compared to base year 2019.
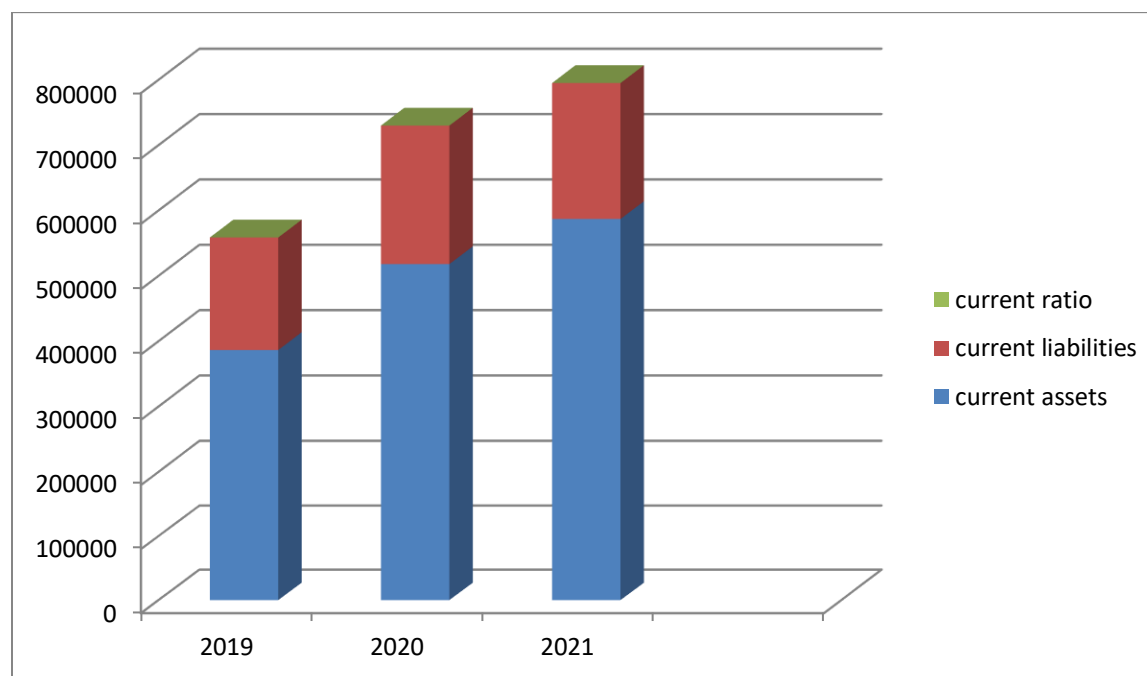
1.4   HDFC BANK

TABLE 1.4.1: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

Year	Current Assets (Rs In Cr.)	Current Liabilities (Rs In Cr.)	Ratio
2019	386525.15	172193.41	2.24
2020	517962.87	212022.94	2.44
2021	586994.92	208089.47	2.82

(Source: Annual Reports of HDFC Bank)

GRAPH 1.4.2: SHOWING CURRENT RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

So we can say that the HDFC current assets are increased over a period of time. In the base year 2019 the current ratio of HDFC was 2.24. In the year 2020 the current ratio of HDFC has been in to 2.44. but in the year 2021 the current ratio of HDFC has been increased to 2.8.which shows that the current assets of HDFC has been increased much as compared to base year 2019.

2. FIXED ASSETS TO NET WORTH RATIO

Fixed assets to net worth is a ratio measuring the solvency of a company. This ratio indicates the extent to which the owner's cash is frozen in the form of fixed assets, such as property, plant and the extent to which funds are available for the company's operations.

Fixed assets to net worth ratio = Fixed Assets
-------------------------------------*100
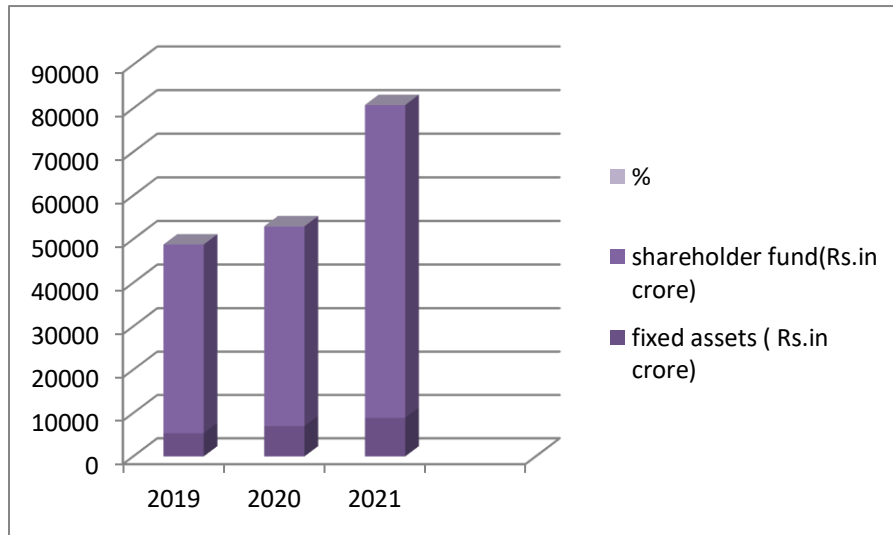Share holder's fund

2.1 BANK OF BAROD

TABLE 2.1.1: FIXED ASSETS TO NET WORTH RATIO THE YEAR 2019 TO 2021

Year	Fixed Assets (Rs.In Cr)	Shareholder Fund (Rs. In Cr)	Percentage
2019	5367.39	43394.77	12.36
2020	6990.30	45941.10	15.21
2021	8889.29	71856.22	12.37

(Source: Annual Reports of Bank of baroda)

GRAPH 2.1.2: SHOWING FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

From the above graph we can say that there is increase in the percentage in the year 2021 that is 12.37% compared to the base year 2020. But it has been decreased in the year 2019 compared to year 2020,so we can say that there is a fluctuation in the percentage of fixed assets to net worth ratio.
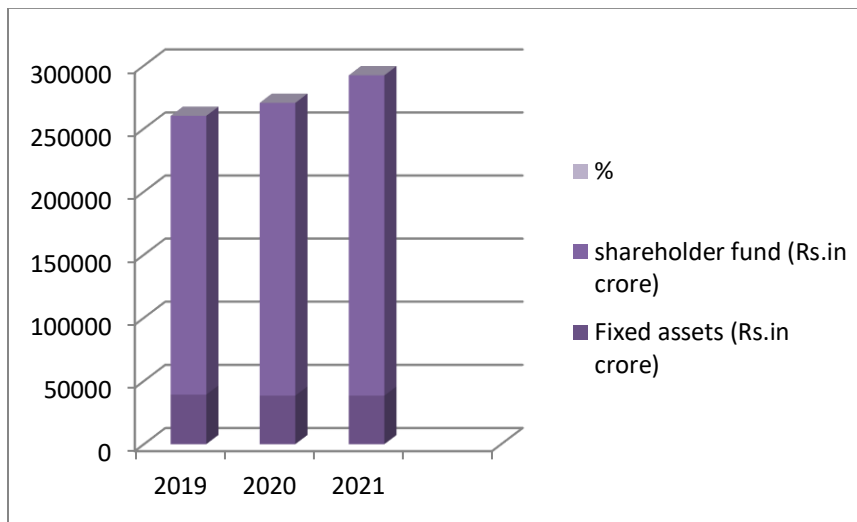
2.2 STATE BANK OF INDIA

TABLE 2.2.1 : FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Fixed Assets (Rs.In Cr)	Shareholder Fund (Rs. In Cr)	Percentage
2019	39197.57	220913.82	17.74
2020	38439.28	232007.43	16.56
2021	38419.24	253875.19	15.13

(Source: Annual Reports of SBI Bank)

GRAPH 2.2.2: SHOWING FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

From the above graph we can say that there is increase in the percentage in the year 2021 that is 15.13% compared to the base year 2020. But it has been decreased in the year 2019 that is 17.74% compared to year 2020 that is 16.56% so we can say that there is a fluctuation in the percentage of fixed assets to net worth ratio.
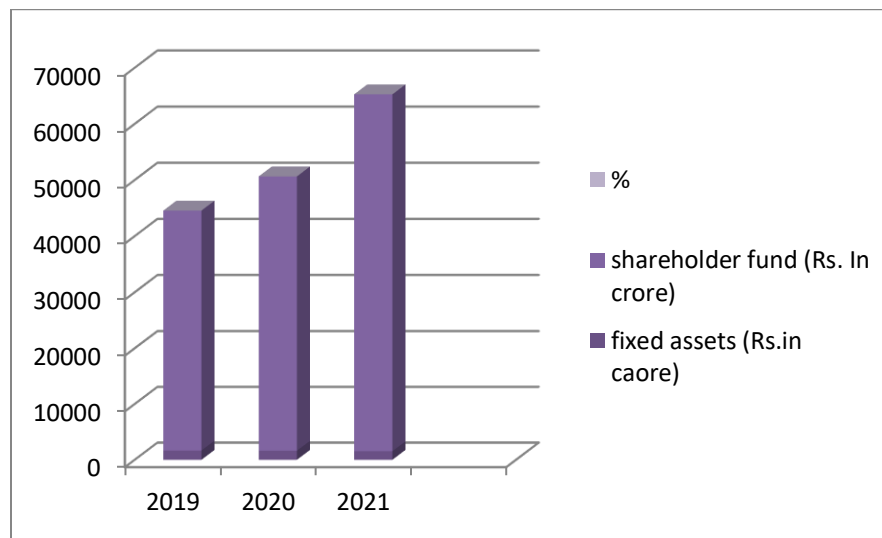
2.3 KOTAK MAHINDRA BANK

TABLE 2.3.1 : FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Fixed Assets (Rs.In Cr.)	Shareholder Fund (Rs. In Cr.)	Percentage
2019	1651.55	42900.45	3.84
2020	1623.13	49018.17	3.31
2021	1535.27	63729.13	2.40

(Source: Annual Reports of kotak Mahindra Bank)

GRAPH 2.3.2: SHOWING FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

From the above graph we can say that there is increase in the percentage in the year 2021 that is 2.40% compared to the base year 2020. But it has been decreased in the year 2019 that is 3.84% compared to year 2020 that is 3.31% so we can say that there is a fluctuation in the percentage of fixed assets to net worth ratio.

2.4 HDFC BANK

TABLE 2.4.1: FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Fixed Assets (Rs.In Cr)	Shareholder Fund (Rs.In Cr)	Percentage
2019	4030.00	149206.35	2.70
2020	4431.92	170986.03	2.59
2021	4909.32	203720.83	2.40

(Source: Annual Reports of HDFC Bank)

GRAPH 2.4.2: SHOWING FIXED ASSETS TO NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

From the above graph we can say that there is increase in the percentage in the year 2021 that is 2.40% compared to the base year 2020. But it has been decreased in the year 2019 that is 2.70% compared to year 2020 that is 2.56% so we can say that there is a fluctuation in the percentage of fixed assets to net worth ratio.
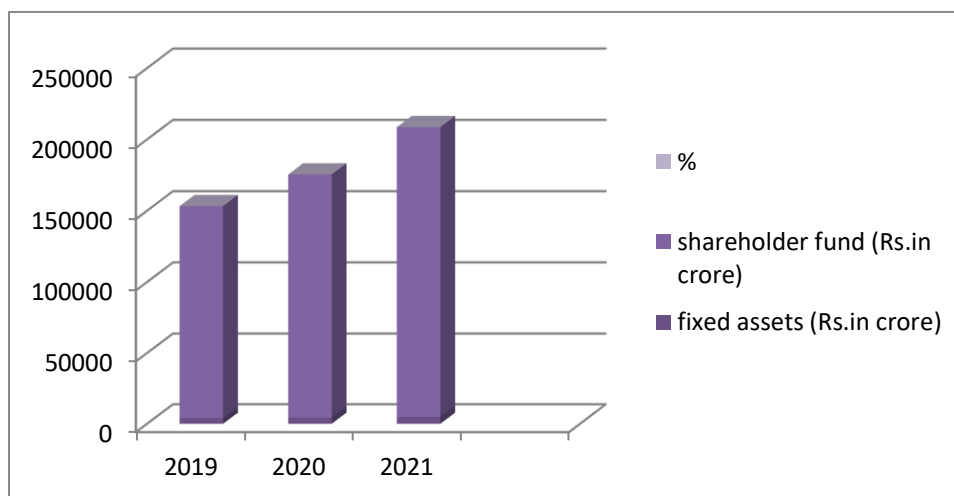
3. **PROPRIETARY RATIO**

The proprietary ratio is also known as equity ratio is the proportion of shareholder's equity to total assets, and as such provides a rough estimate of the amount of capitalization currently used to support a business.

Proprietary ratio =   shareholders equity

---*100
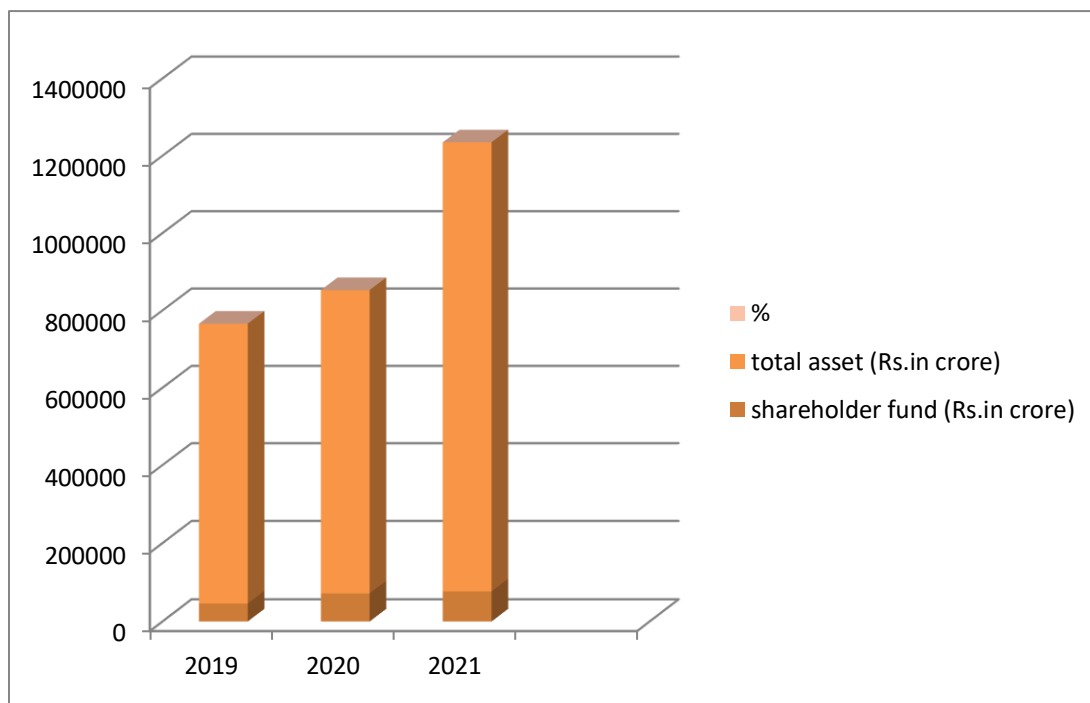
Total assets

3.1 BANK OF BARODA

TABLE 3.1.1: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO2021

Year	Share Holder's Fund (Rs. In Crore)	Total Asset (Rs. In Crore)	Percentage
2019	45941.10	719999.77	6.38
2020	71856.22	780987.40	9.20
2021	77045.72	1157915.52	6.65

(Source: Annual Reports of Bank of baroda)

GRAPH 3.1.2: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Hence, we can say that the proprietary ratio increased in the year2021compared to base year 2020. In the base year 2020 it was 9.20 and later on it has been increased to 6.65% in the year 2019 that means there was a increase the ratio. On the off chance That the proportion. Is high, this shows an organization. Has can adequate measure. Of value to help the Elements. Of business, and to most likely. Has space in its budgetary structure. To assume extra obligation, if important. So we can say that the Bank of baroda has an adequate measure of value to help the capacity of business.
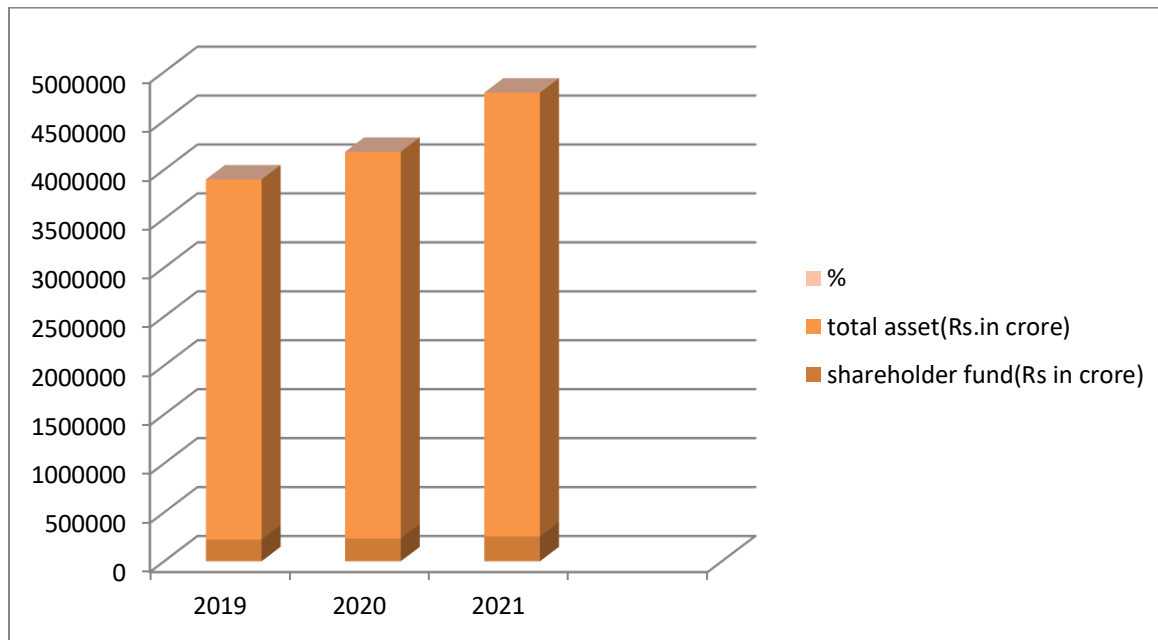
3.2 STATE BANK OF INDIA

TABLE 3.2.1: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO 2021

Year	Share Holder's Fund (Rs. In Cr)	Total Asset (Rs. In Cr)	Percentage
2019	220913.82	3680914.25	6.00
2020	232007.43	3951393.92	5.87
2021	253875.19	4534429.63	5.59

(Source: Annual Reports of SBI Bank)

GRAPH 3.2.2: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Hence, we can say that the proprietary ratio increased in the year2021compared to base year 2020. In the base year 2020 it was 5.87 and later on it has been decreased to 5.59 in the year 2019 that means there was a decrease the ratio.
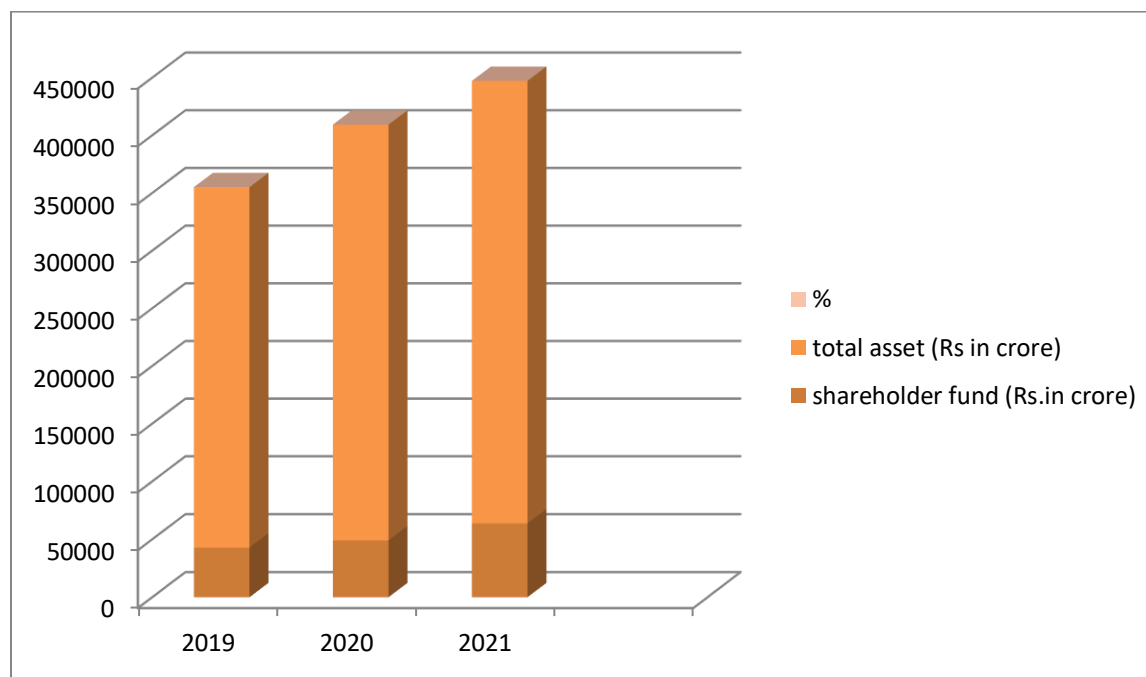
3.3KOTAK MAHINDRA BANK

TABLE 3.3.1.: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO2021

Year	Share holder's fund (Rs. In cr.)	Total asset (Rs. In cr.)	Percentage
2019	42900.45	312172.09	13.74
2020	49018.17	360251.68	13.60
2021	63729.13	383488.62	16.61

(Source: Annual Reports of kotak Mahindra Bank)

GRAPH 3.3.2.: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Hence, we can say that the proprietary ratio increased in the year2021compared to base year 2020. In the base year 2020 it was 13.60 and later on it has been decreased to 13.74 in the year 2019 that means there was a decrease the ratio.
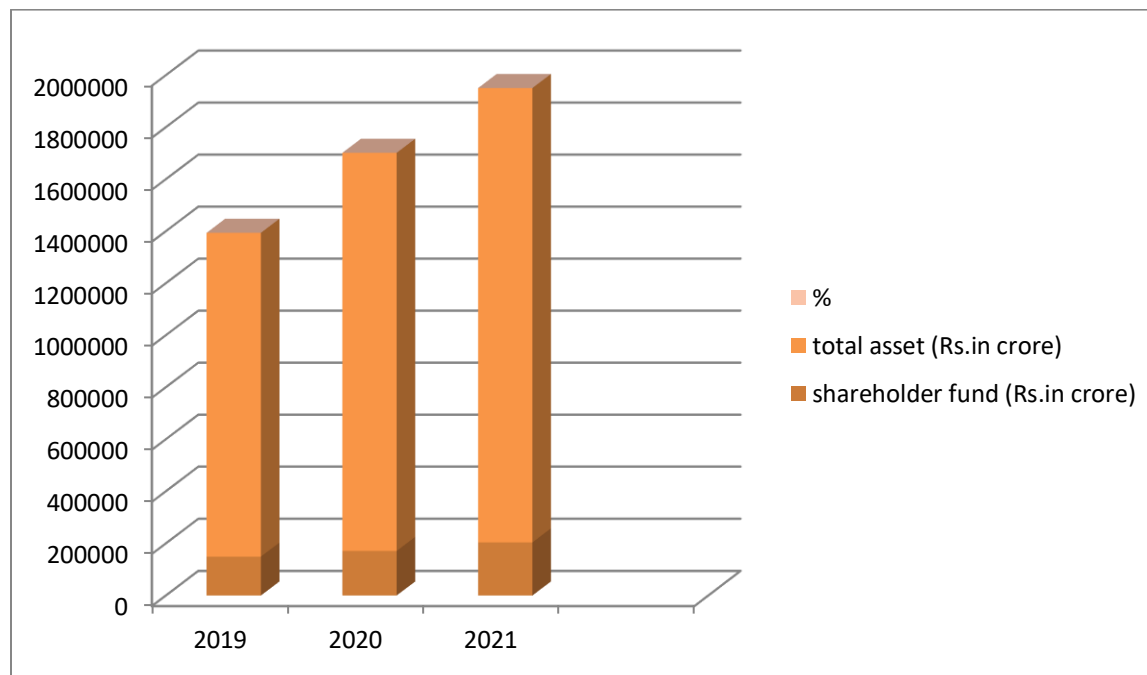
3.4 HDFC BANK

TABLE 3.4.1: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO2021

Year	Share holder's fund (Rs. In cr)	Total asset (Rs. In cr)	Percentage
2019	149206.35	1244540.69	11.98
2020	170989.03	1530511.26	11.17
2021	203720.82	1746870.52	11.66

(Source: Annual Reports of HDFC Bank)

GRAPH 3.4.2: SHOWING PROPRIETARY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Hence, we can say that the proprietary ratio increased in the year2021compared to base year 2020. In the base year 2020 it was 11.17 and later on it has been Increased to 11.98 in the year 2019 that means there was a increase the ratio.

4. RETURN ON NET WORTH RATIO

Return on Net Worth is used in finance as a measure of a company's profitability. It reveals how much profit a company generates with the money that the equity shareholder have invested.

Return on Net Worth =   Net profit
                        -----------------------*100
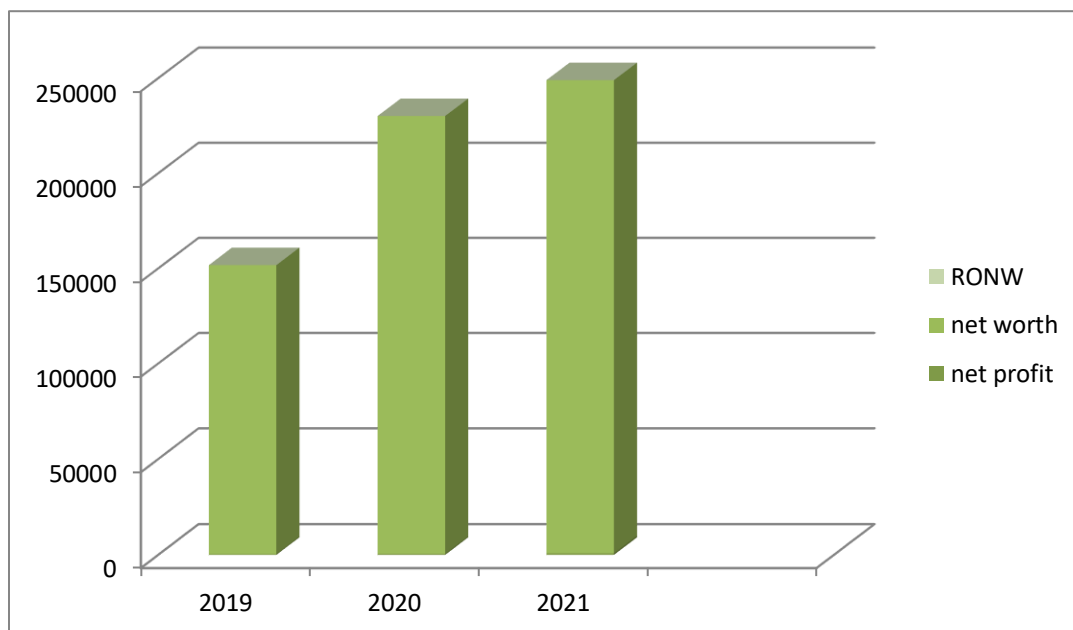   Net worth

4.1 BANK OF BARODA

TABLE 4.1.1.: SHOWING RETURN ON NETWORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Net profit (In Rs. Cr)	Net Worth (In Rs. Cr.)	RONW
2019	433.52	151295.9	0.28
2020	546.19	229575.35	0.23
2021	828.96	248154.12	0.33

(Source: Annual Reports of Bank of baroda)

GRAPH 4.1.2: SHOWING RETURN ON NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

So we can say that there is a fluctuation in ratio's when compared to base year 2019. In the base year it was 0.28% but after the years like 2020 it has been decreased, which indicates that there is a decrease in the profitability of the bank. In the year 2021 it has been increased to 0.33%, which states that there is an improvement in the bank's profitability.
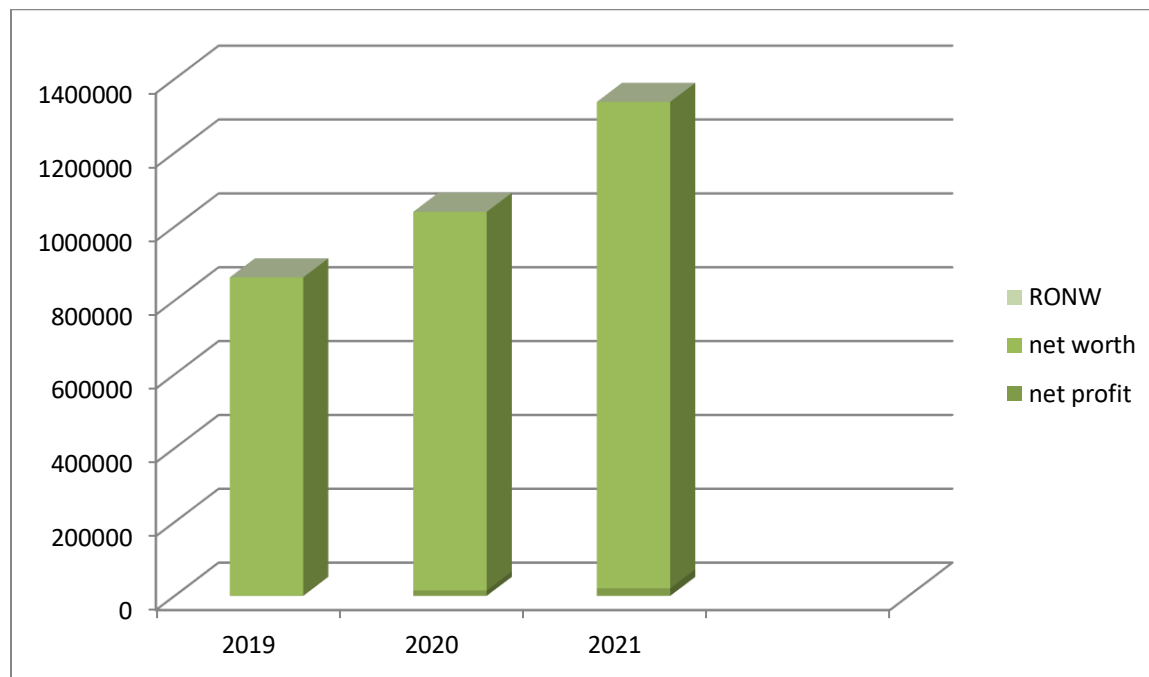
4.2 STATE BANK OF INDIA

TABLE 4.2.1: SHOWING RETURN ON NETWORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Net profit (In Rs. Cr.)	Net Worth (In Rs Cr.)	RONW
2019	862.23	861667.65	0.10
2020	14488.11	1025538.1	1.41
2021	20410.47	1317398.07	1.54

(Source: Annual Reports of SBI)

GRAPH 4.2.2: SHOWING RETURN ON NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

So we can say that there is a fluctuation in ratio's when compared to base year 2019. In the base year it was 0.10 but after the years like 2020 it has been increased, which indicates that there is a increase in the profitability of the bank. In the year 2021 it has been increased to 1.54%, which states that there is an improvement in the bank's profitability.
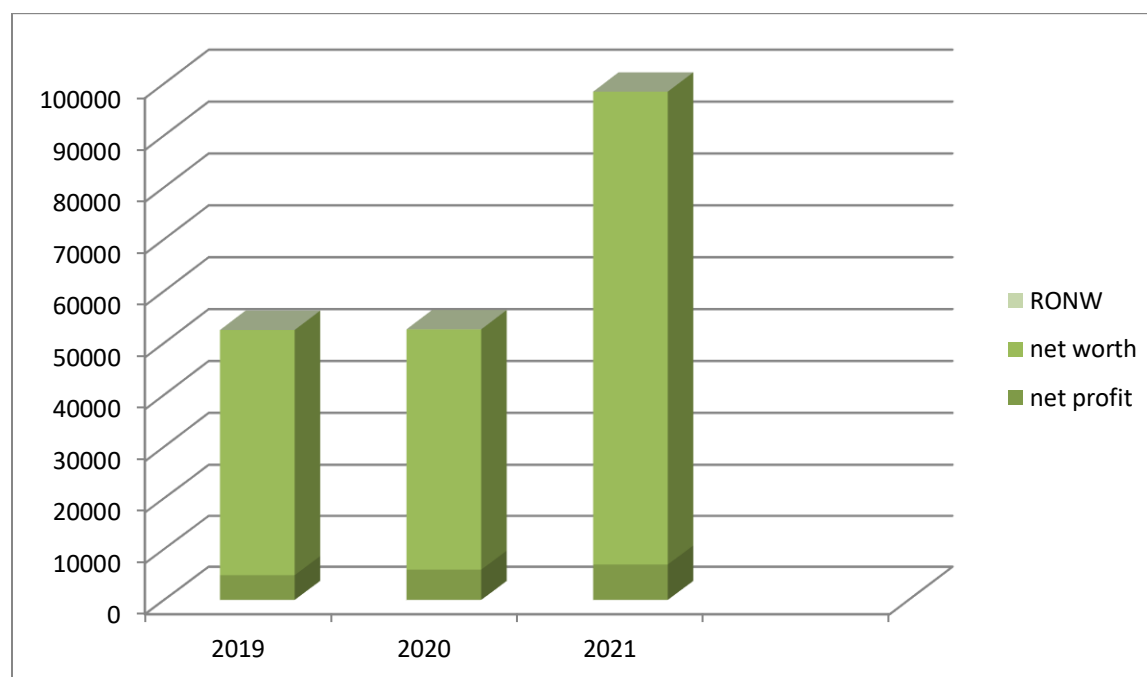
4.3 KOTAK MAHINDRA BANK

TABLE 4.3.1: SHOWING RETURN ON NETWORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Net Profit (In Rs. Cr)	Net Worth (In Rs. Cr)	RONW
2019	4865.33	47636.45	10.21
2020	5947.18	46680.13	12.74
2021	6964.84	91472.36	7.61

(Source: Annual Reports of kotak mahindra bank)

GRAPH 4.3.2.: SHOWING RETURN ON NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

So we can say that there is a fluctuation in ratio's when compared to base year 2019. In the base year it was 10.21 but after the years like 2020 it has been increased, which indicates that there is a increase in the profitability of the bank. In the year 2021 it has been decreased to 7.61%.
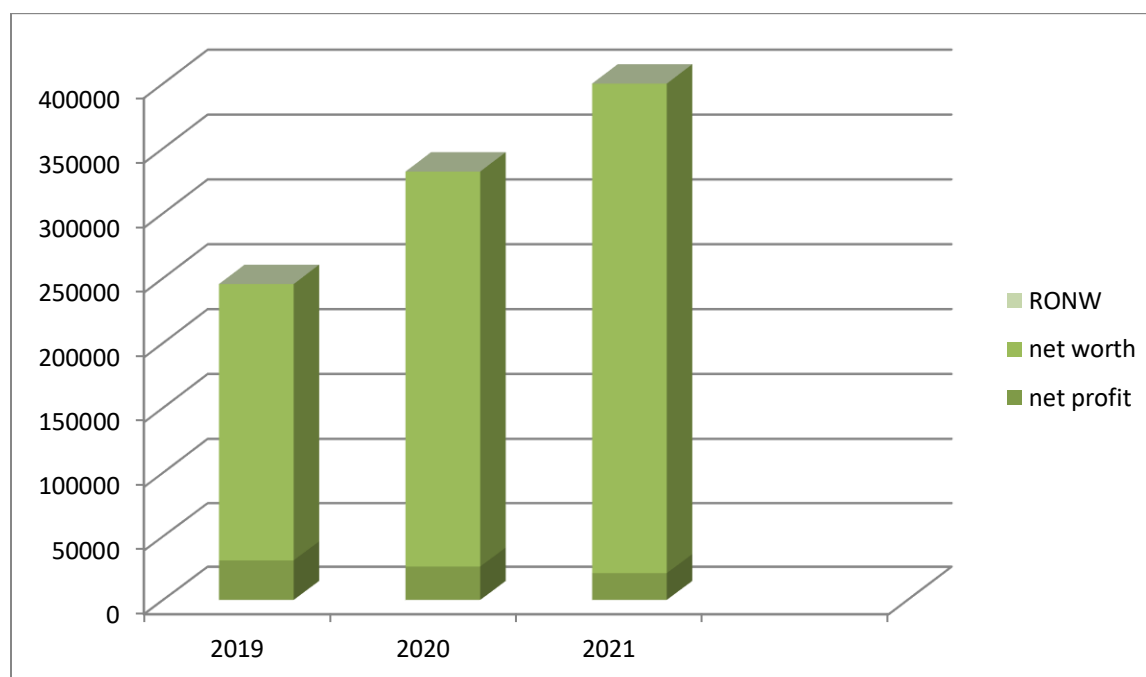
4.4 HDFC BANK

TABLE 4.4.1.: SHOWING RETURN ON NETWORTH RATIO FROM THE YEAR 2019 TO 2021

Year	Net Profit (In Rs. Cr)	Net Worth (In Rs Cr.)	RONW
2019	31116.53	214331.74	14.51
2020	26257.32	305939.93	8.58
2021	21078.17	378905.45	5.56

(Source: Annual Reports of HDFC bank)

GRAPH 4.4.2: SHOWING RETURN ON NET WORTH RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

So we can say that there is a fluctuation in ratio's when compared to base year 2019. In the base year it was 14.51% but after the years like 2020 it has been decreased, which indicates that there is a decrease in the profitability of the bank. In the year 2021 it has been decreased to 5.56%.

5. CAPITAL ADEQUACY RATIO

Capital Adequacy Ratio is otherwise called Capital to Risk Assets Ratio, is the proportion of a bank's cash-flow to its hazard . National controllers track a bank CAR 'to guarantee that it can retain a sensible measure of misfortune and conforms to statutory Capital prerequisite.
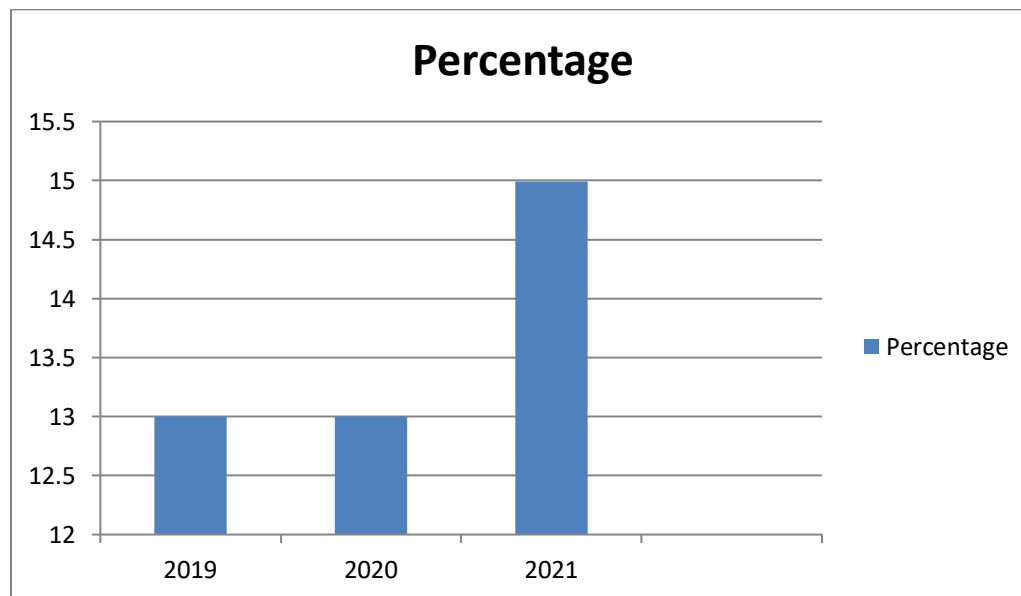
5.1 BANK OF BARODA

TABLE 5.1.1: SHOWING CAPITAL ADEQUACY RATIO FROMTHE YEAR 2019 TO 2021.

YEAR	PERCENTAGE
2019	13.00
2020	13.00
2021	14.99

(Source: Annual Reports of bank of baroda)

GRAPH 5.1.2: SHOWING CAPITAL ADEQUACY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION:

Thus, we can say that there is gradually increase in the capital adequacy of the bank. The capital adequacy measure the bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. In above graph we can say that the Bank of baroda capital adequacy was 13% in the base year 2019 and it has been equl to 13% in the year 2020. In the year 2021 it has been increased to 14.99%. So this may states that the Bank is in the position of intended to protect depositors and promote stability and efficiency of financial system.
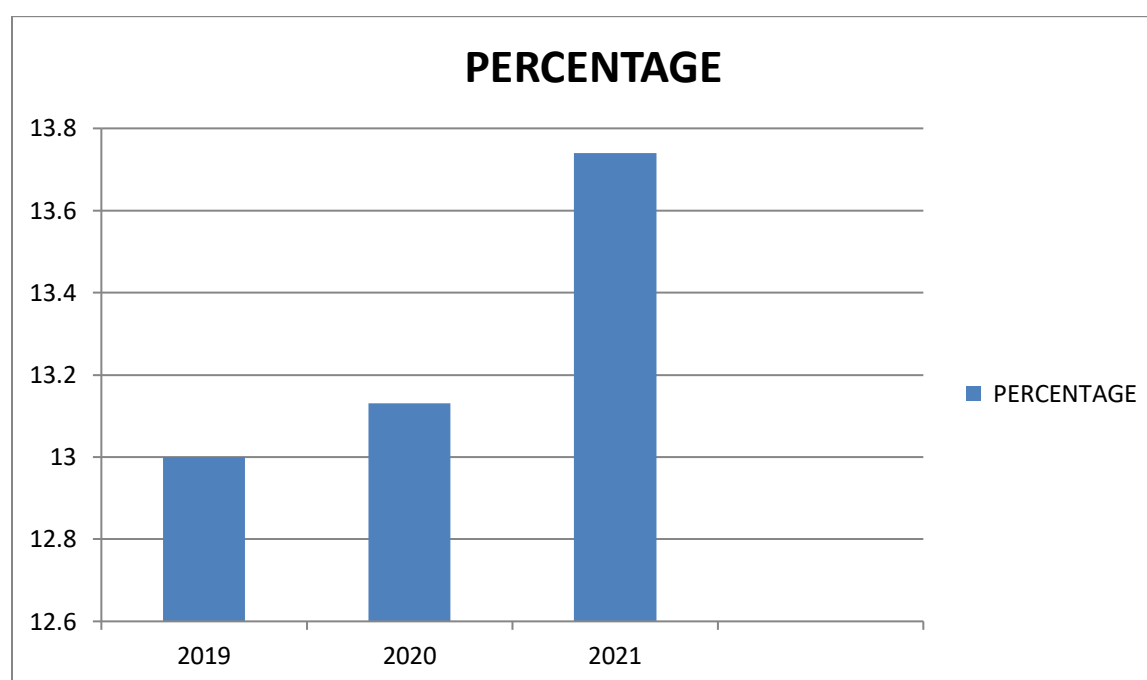
5.2 STATE BANK OF INDIA

TABLE 5.2.1: SHOWING CAPITAL ADEQUACY RATIO FROMTHE YEAR 2019 TO 2021.

YEAR	PERCENTAGE
2019	13.00
2020	13.13
2021	13.74

(Source: Annual Reports of SBI)

GRAPH 5.2.2: SHOWING CAPITAL ADEQUACY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Thus, we can say that there is gradually increase in the capital adequacy of the bank. The capital adequacy measure the bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. In above graph we can say that the SBI capital adequacy was 13% in the base year 2019 and it has been increased to 13.13% in the year 2020. In the year 2021 it has been increased to 13.74%.
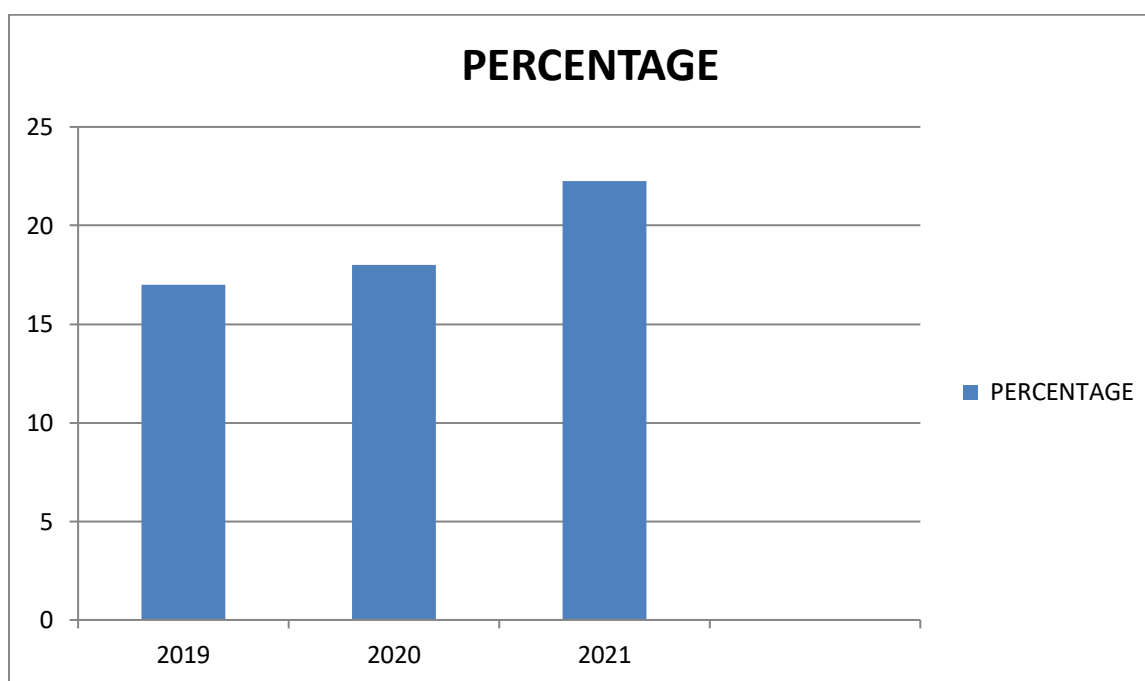
5.3 KOTAK MAHINDRA BANK

TABLE 5.3.1: SHOWING CAPITAL ADEQUACY RATIO FROMTHE YEAR 2019 TO 2021.

YEAR	PERCENTAGE
2019	17.00
2020	18.00
2021	22.26

(Source: Annual Reports of kotak Mahindra bank)

GRAPH 5.3.2: SHOWING CAPITAL ADEQUACY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

Thus, we can say that there is gradually increase in the capital adequacy of the bank. The capital adequacy measure the bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. In above graph we can say that the kotak Mahindra bank capital adequacy was 17% in the base year 2019 and it has been increased to 18% in the year 2020. In the year 2021 it has been increased to 22.26%.
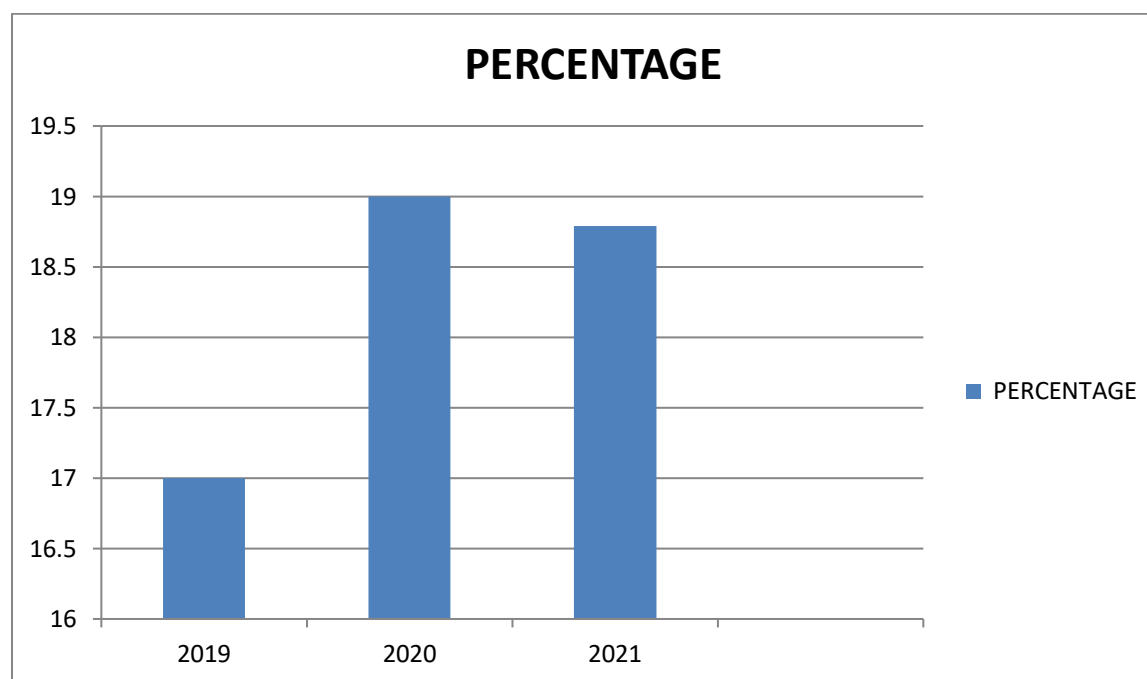
5.4 HDFC BANK

TABLE 5.4.1.: SHOWING CAPITAL ADEQUACY RATIO FROMTHE YEAR 2019 TO 2021.

YEAR	PERCENTAGE
2019	17.00
2020	19.00
2021	18.79

(Source: Annual Reports of HDFC bank)

GRAPH 5.4.2: SHOWING CAPITAL ADEQUACY RATIO FROM THE YEAR 2019 TO 2021

INTERPRETATION

In above graph we can say that the HDFC bank capital adequacy was 17% in the base year 2019 and it has been increased to 19% in the year 2020. In the year 2021 it has been decreased to 18.79%.

6. EARNING PER EQUITY SHARE

Earning per share (EPS), also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding is hares at the end of the year.

Earning per Eq. Share =   Net Profit after Tax & Preference Dividend

----

No. of Equity Share

6.1BANK OF BARODA

TABLE 6.1.1: SHOWING EPS FOR THE PERIOD OF 2019 TO 2021

YEAR	EPS
2019	0.81
2020	0.59
2021	0.82

(Source: Annual Reports of bank of baroda)

GRAPH 6.1.2: SHOWING EARNING PER EQUITY RATIO FOR THE PERIOD 2019 TO 2021
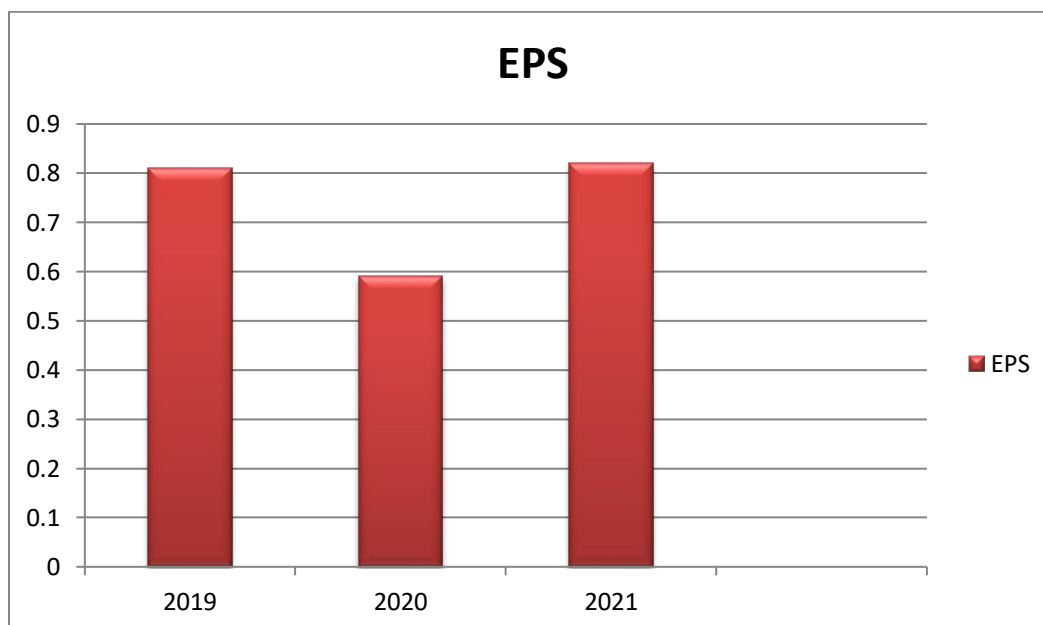
INTERPRETATION:

Thus, we can say that the earnings per share of Bank of baroda is fluctuating over aperiod of 3 years . in the base year 2019 the EPS was 0.81per share. In the next year 2020 it has been decreased to 0.59 per share . but in the year 2021 it has been increased to 0.82per share and , that means the equity share holder's of Bank of baroda gets low earnings on their holdings. EPS tells how much. money the company. is making in profits.
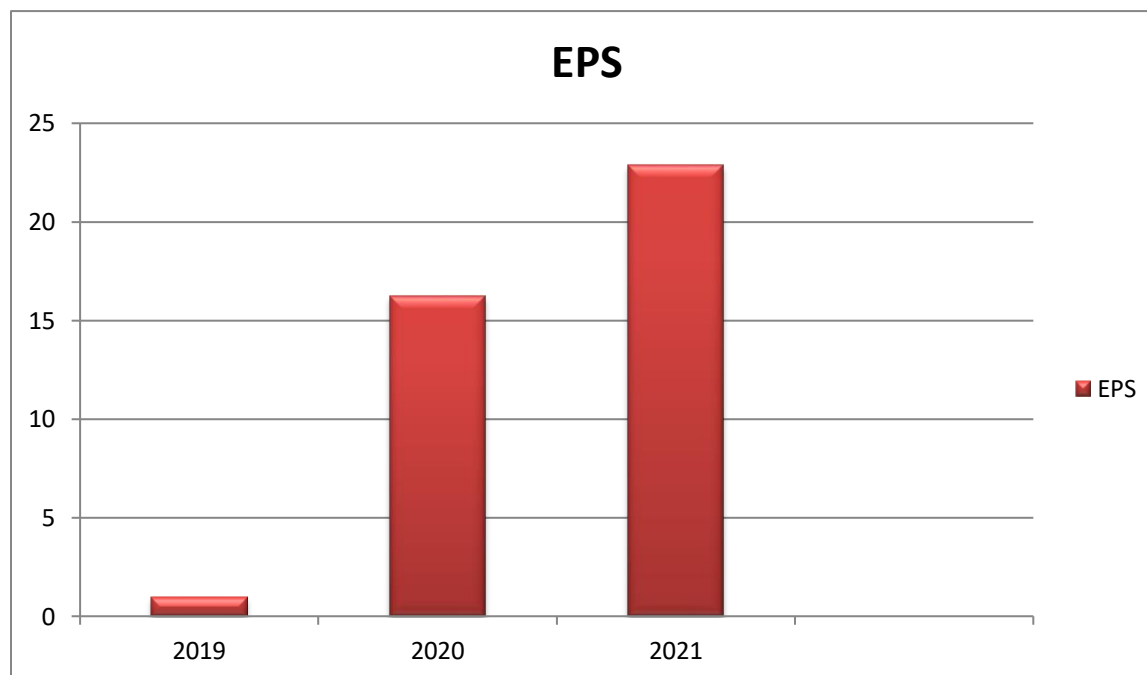
6.2STATE BANK OF INDIA

TABLE 6.2.1: SHOWING EPS FOR THE PERIOD OF 2019 TO 2021

YEAR	EPS
2019	0.96
2020	16.23
2021	22.86

(Source: Annual report of bank SBI)

GRAPH 6.2.2: SHOWING EARNING PER EQUITY RATIO FOR THE PERIOD 2019 TO 2021

INTERPRETATION

Thus, we can say that the earnings per share of SBI is fluctuating over a period of 3 years. in the base year 2019 the EPS was 0.96per share. In the next year 2020 it has been increased to 16.23 per share. but in the year 2021 it has been increased to 22.86 per share and , that means the equity share holder's of SBI gets low earnings on their holdings. EPS tells how much. money the company is making in profits.
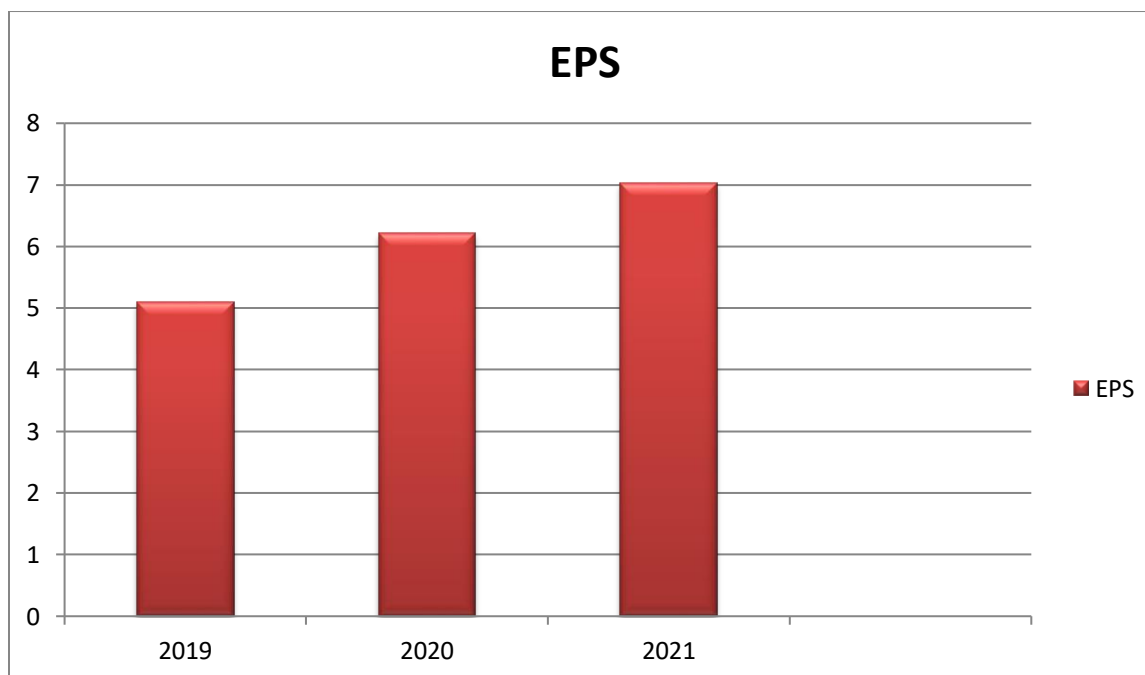
6.3KOTAK MAHINDRA BANK

TABLE 6.3.1.: SHOWING EPS FOR THE PERIOD OF 2019 TO 2021

YEAR	EPS
2019	5.09
2020	6.21
2021	7.02

(Source: Annual Reports of kotak madhinda bank)

GRAPH 6.3.2: SHOWING EARNING PER EQUITY RATIO FOR THE PERIOD 2019 TO 2021

INTERPRETATION

Thus, we can say that the earnings per share of kotak Mahindra bank is fluctuating over aperiod of 3 years . in the base year 2019 the EPS was 5.09 per share. In the next year 2020 it has been increased to 6.21 per share . but in the year 2021 it has been increased to 7.02 per share and , that means the equity share holder's of kotak Mahindra bank gets low earnings on their holdings. EPS tells how much. money the company is making in profits.
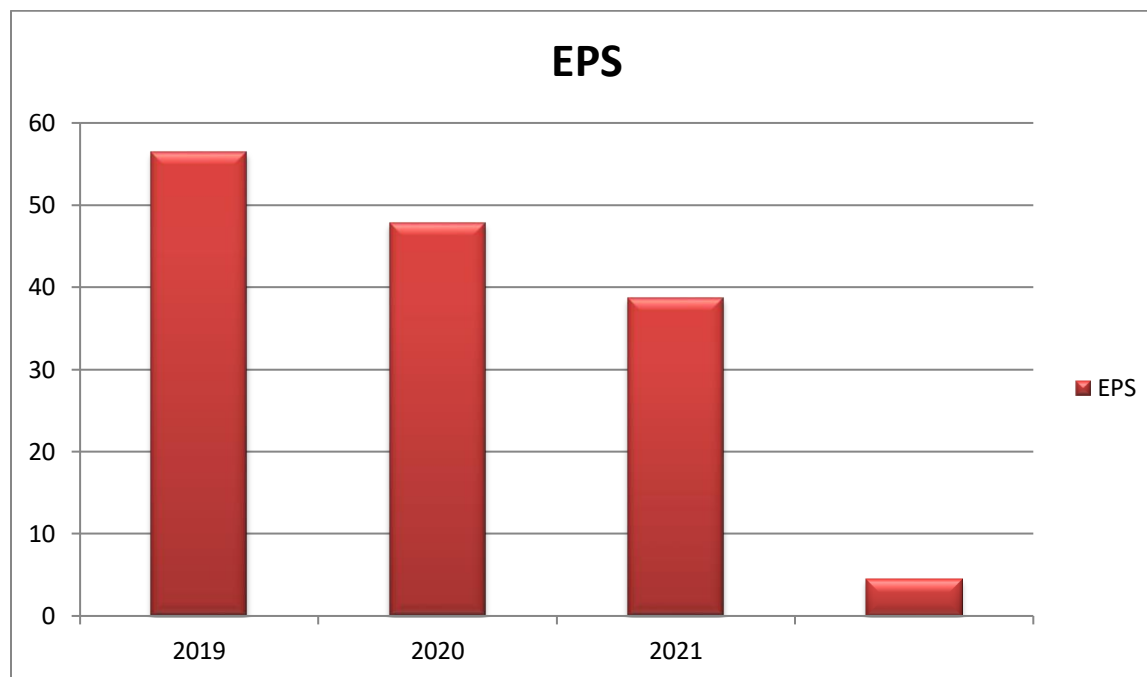
6.4HDFC BANK

TABLE 4.6: SHOWING EPS FOR THE PERIOD OF 2019 TO 2021

YEAR	EPS
2019	56.43
2020	47.88
2021	38.69

(Source: Annual Reports of HDFC bank)

GRAPH 4.6: SHOWING EARNING PER EQUITY RATIO FOR THE PERIOD 2019 TO 2021

INTERPRETATION

Thus, we can say that the earnings per share of HDFC bank is fluctuating over aperiod of 3 years . in the base year 2019 the EPS was 56.43 per share. In the next year 2020 it has been decreased to 47.88 per share . but in the year 2021 it has been decreased to 38.69 per share and , that means the equity share holder's of HDFC gets low earnings on their holdings. EPS tells how much. money the company is making in profits.

7. EQUITY RATIO

Equity ratio is a financial ratio indicating the comparative proportion of equity used to economics a company's assets. The equity ratio is an investment leverage solvency ratio that measures the amount of assets that are financed by owner's fund by comparing. The total equity in the company to the. Total assets.

Equity ratio =   Shareholder's Fund

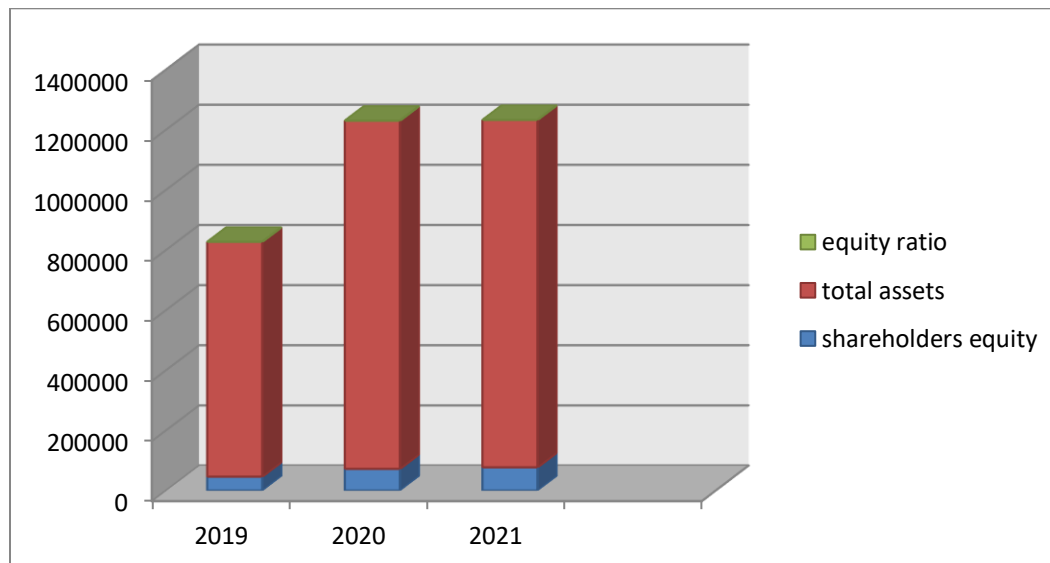
Total Assets

7.1 BANK OF BARODA

TABLE 7.1.1.: SHOWING EQUITY RATIO FOR THE PERIOD 2019 TO 2021

YEAR	SHARE HOLDER'S EQUITY (In Rs. Cr.)	TOTAL ASSETS (In Rs.Cr.)	EQUITY RATIO
2019	45941.10	780987.40	0.05
2020	71856.22	1157915.52	0.06
2021	77045.72	1155364.77	0.06

(Source: Annual Reports of bank of baroda)

GRAPH 7.1.2: SHOWING EQUITY RATIO FOR THE PERIOD OF 2019 TO 2021

INTERPRETATION:

Hence, the equity ratio tells that higher the debt equity higher the risk, from the above graph we can say that there is no much changes from the year 2019 to 2021. In the year 2019 it was 0.05. in the year 2020 it has been increased to 0.06. In the year 2020 the equity ratio remains same 0.06.

7.2 STATE BANK OF INDIA

TABLE 7.2.1.: SHOWING EQUITY RATIO FOR THE PERIOD 2019 TO 2021

YEAR	SHARE HOLDERS EQUITY	TOTAL ASSETS	EQUITY RATIO
2019	220913.82	3680914.25	0.06
2020	232007.43	3951393.92	0.05
2021	253875.19	4534429.63	0.05

(Source: Annual Reports of SBI)

GRAPH 7.2.2.: SHOWING EQUITY RATIO FOR THE PERIOD OF 2019 TO 2021

INTERPRETATION:

Hence, the equity ratio tells that higher the debt equity higher the risk, from the above graph we can say that there is no much changes from the year 2019 to 2021. In the year 2019 it was 0.06. in the year 2020 it has been decreased to 0.05. In the year 2020 the equity ratio remains same 0.05.
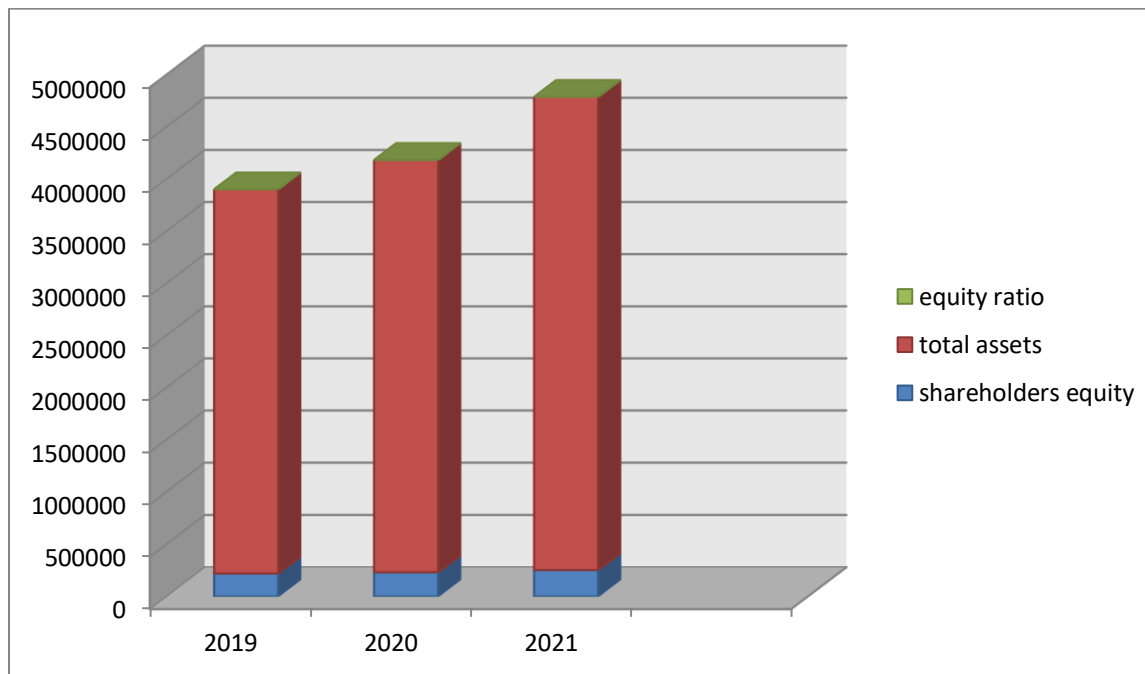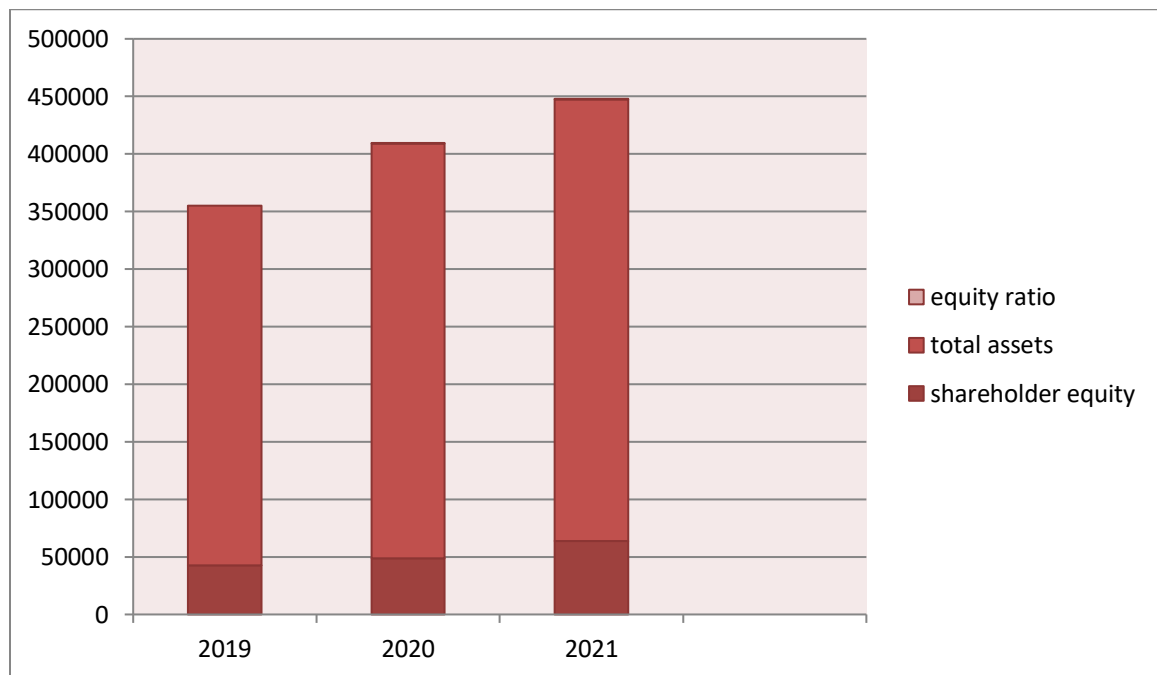
7.3KOTAK MAHINDRA BANK

TABLE 7.3.1.: SHOWING EQUITY RATIO FOR THE PERIOD 2019 TO 2021

YEAR	SHARE HOLDERS EQUITY(In Rs.Cr.)	TOTAL ASSETS (In Rs.Cr)	EQUITY RATIO
2019	42900.45	312172.09	0.13
2020	49018.17	360251.68	0.13
2021	63729.13	383488.62	0.16

(Source: Annual Reports of kotak mahindra bank)

GRAPH 7.3.2: SHOWING EQUITY RATIO FOR THE PERIOD OF 2019 TO 2021

INTERPRETATION:

Hence, the equity ratio tells that higher the debt equity higher the risk from the above graph we can say that there is no much changes from the year 2019 to 2021. In the year 2019 and 2020 it has been remains to 0.13. in the year 2021 it has increased 0.16.
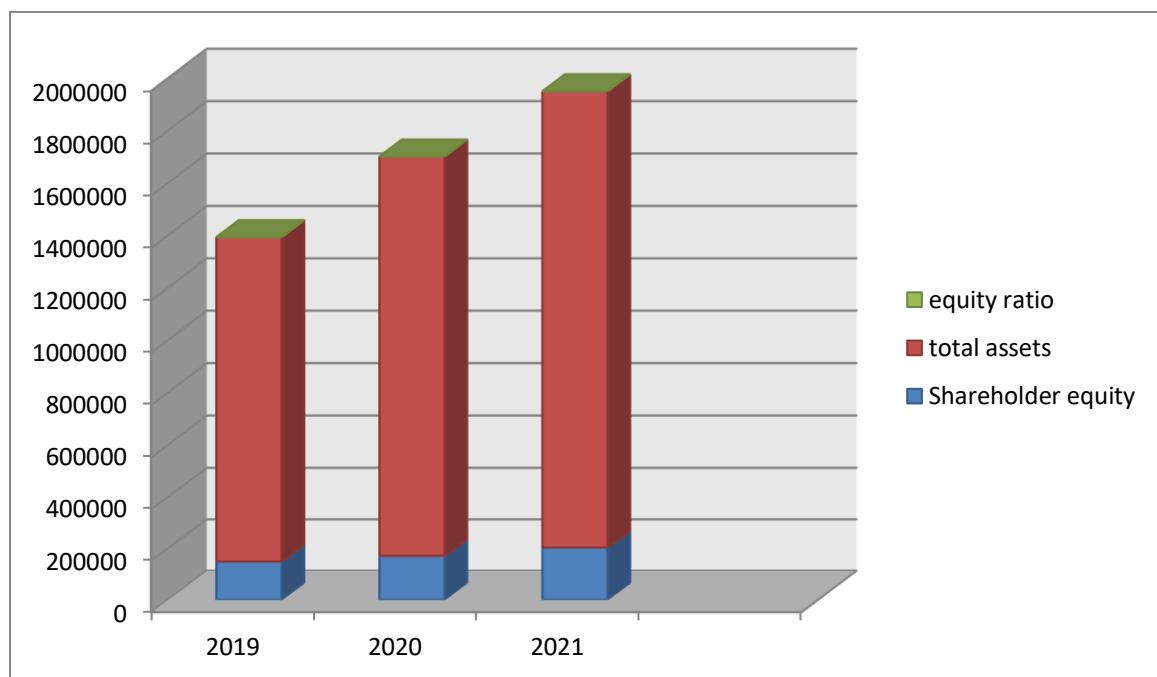
7.4 HDFC BANK

TABLE 7.4.1: SHOWING EQUITY RATIO FOR THE PERIOD 2019 TO 2021

YEAR	SHAREHOLDERS EQUITY(In Rs Cr.)	TOTAL ASSETS (In Rs Cr.)	EQUITY RATIO
2019	149206.35	1244540.69	0.11
2020	170986.03	1530511.26	0.11
2021	203720.83	1746870.52	0.11

(Source: Annual Reports of HDFC bank)

GRAPH 7.4.2: SHOWING EQUITY RATIO FOR THE PERIOD OF 2019 TO 2021

INTERPRETATION:

Hence, the equity ratio tells that higher the debt equity higher the risk, from the above graph we can say that there is no much changes from the year 2019 to 2021. In the year 2019 it was 0.06. in the year 2020 it has been decreased to 0.05. In the year 2020 the equity ratio remains same 0.05.

CHAPTER NO.5

FINDINGS

FINDINGS

- From Bank of baroda ,SBI, kotak Mahindra bank and HDFC bank current ratio was increasing every year.

- Fixed assets to net worth ratio from bank of baroda, kotak Mahindra bank, HDFC bank the percentage of ratio is increasing from the year 2019 to 2021 & from SBI was decreasing ratio in the year 2019 to 2021.

- The proprietary ratio is also increasing and it shows upward move from bank of baroda,kotak Mahindra bank, HDFC bank in the year 2019 to 2021.from SBI was decreasing ratio in the year 2019 to 2021

- Return on net worth was fluctuated over a period. It was decreased during the year 2019 to 2021 from kotak Mahindra bank and HDFC bank . from bank of baroda and SBI was increasing in the year 2019 to 2021.

- Capital adequacy ratio was increased during the year 2019 to 2021 from bank of baroda, SBI, kotak Mahindra bank and HDFC bank.

- Earning per equity share was increased during the year 2019 to 2021 from bank of baroda, SBI, kotak Mahindra bank and HDFC bank.

- Equity ratio was increased during the year 2019 to 2021 from bank of baroda, SBI, kotak Mahindra bank and HDFC bank.

CHAPTER NO.6
CONCLUSION

CONCLUSION

Asset Liability Management plays very important role in planning and managing the Assets and Liabilities of Banks, against the risk exposed due to the changing environment in the banking business. Banking regulators require a minimum capital adequacy, net worth and capital deposit ratio. Thus, Banks today need to match their assets and liabilities and at the same time balancing their objectives of profitability, liquidity and risk.

This attempt was to evaluate and matching asset and liability of the Bank of baroda ,SBI, kotak Mahindra bank and HDFC. It is evident that bank performing satisfactorily in terms of credit, deposits and interest earn, other income etc., This analysis showing increasing trend from one year to another year.

This study discloses.The findings and recommendations. Which would be beneficial. For the expansion and improvement to the Bank.

CHAPTER NO.7
BIBLOGRAPHY

BIBLIOGRAPHY

- https://www.moneycontrol.com/financials/hdfcbank/balance-sheetVI/HDF01.
- https://www.investopedia.com/terms/a/asset-liabilitymanagement.asp
- https://www.moneycontrol.com/financials/kotakmahindrabank/balance-sheetVI/KMB
- https://economictimes.indiatimes.com/bank-of-baroda/balancesheet/companyid-12040.cms
- https://www.capitalmarket.com/Company-Information/Financials/Balance-sheet/State-Bank-of-India/1375

REFERANCE

- Khurana.S.K.(2000), "Asset Liability Management", skylark publicationas, New Delhi
- Sharma, Kapil and Kulkarni.P.R.(2006), "Asset Liability Management Approach in Indian Banks: A Review and Suggestions", the Journal of Accounting and Finance, vol xx, no.2, april to September, pp.314.
- Subramaniam, Ganti(1995), " Asset Liability Management for Banks in a deregulated Environment", prajnan, vol.XXIII, no. 1, pp. 11-27
- Kamath.M.V.(1996), "Asset Liability Management", Canbank Quarterly Review, October-March, vol.1, no 4 and vol, VII, No. 1, p.10