



An examination of the functional analysis of Bank of Baroda with a focus on financial parameters

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ABSTRACT

Banking involves safeguarding money on behalf of others. Banks lend this money, earning interest that contributes to profits for both the bank and its customers. A bank is a licensed financial institution that accepts deposits and extends loans. This study aims to assess the performance of Bank of Baroda over the past five years (2016-2021) using ratio analysis techniques. The analysis provides valuable insights into the financial strength of the bank in terms of Asset Quality, Management Efficiency, and Earning Ratios. Ratios are derived from a thorough examination of the bank's Balance Sheet and Profit and Loss Account. Bank of Baroda has demonstrated an improvement in its financial performance in recent quarters, evident through increasing net profits and enhanced asset quality. Profitability ratios, including return on assets and return on equity, have seen positive developments, indicating that the bank is generating more profit from its assets and equity.

Keyword: Banking, Customers, Asset Quality, Financial, Profitability, Equity.

INTRODUCTION

Banking is the business of protecting money for others. Banks lend this money, generating interest that creates profits for the bank and its customers. A bank is a financial institution licensed to accept deposits and make loans. Private banks are banks owned by either the individual or a general partner(s) with limited partner. Banking has helped in developing the vital sector of the economy and usher in a new dawn of progress on the Indian horizon. Bank of Baroda (BOB) is an Indian Nationalized banking and financial services company.

It is the fourth largest Nationalized bank in India, with 132million customers. Ratio analysis techniques as to give significant insights about the financial competence of Banks in terms of Asset Quality. The Ratio are determined from the critical examination of Balance sheet and Profit and Loss Account of Bank.

The study is an attempt to analyze the performance of Bank of Baroda for the last five years (2016- 2021). Ratio analysis technique so as to give significant insights about the financial competence of Banks in terms of Asset Quality, Management Efficiency and Earning Ratio. The Ratio are determined from the critical examination of Balance sheet and Profit and Loss Account of Bank. Ratio Analysis is one of the methods of financial investigation where ratio are accustomed to assessing the financial condition and execution of a Bank. From the analysis it could be suggested that the bank has to take right measures to increase the income in order to achieve high profit.

OBJECTIVES OF THE STUDY

To make comparative financial performance of Bank of Baroda in different time period. To ascertain the financial performance in terms of solvency ratios. To offer suitable suggestions to improve the performance of Bank of Baroda. The required data for this study covers for the period from 2018-2022 of five years. The secondary data has been collected through websites of Bank of Baroda. The other secondary information was collected from various journals, books, newspapers and websites related to study. The data so collected have been analyzed by using various techniques such as comparative balance sheet technique, trend analysis and Ratio analysis.

ANALYSIS AND INTERPRETATION

Financial Statement Analysis, or FSA, is the process of reviewing and analyzing a company's financial statements to make better economic decisions. It is created to study the financial health and overall performance of the company.

Data are actual measurements and observations. Interpretations represent an effort to characterize or clarify what has been measured and observed. How well an interpretation fits the available data determines how valid it is. As the database changes, interpretations might also change. This interplay between analysis and interpretation is what makes science so successful and progressive.

In this chapter an analytical study was taking 5years data from 2018-2022. For the purpose of data analysis, the researcher collected secondary data from Asian paints. The purpose of financial statement analysis and interpretation is to ascertain the import and significance of financial statement data. A wise dividend policy makes it easier to predict future earnings,

the capacity to pay interest, the maturity of debt, and profitability.

The primary purpose financial analysis identifies a company's strengths and weaknesses by grouping and analyzing the data found in its financial statements, comparing its various elements, and looking at its content.

- The analysis helps to determine the profitability, solvency, liquidity and stability of the company.
- The statements included in the analysis are income statement, balance sheet, cash flow statement and statement of changes in equity.
- FSA compares the company's performance over a period of time with itself (intra company basis), between other companies(intercompany basis),from the same industry or another and against that industry's averages.

BANK OF BARODA COMPARATIVE BALANCE SHEET YEAR: 2018 AND 2019

CATEGORY	PARTICULARS	AMOUNT IN 2018	AMOUNT IN 2019	CHANGE IN ABSOLUTE AMOUNT	CHANGE IN PERCENTAGE %
EQUITIES AND LIABILITIES	Equity Share Capital	530.36	530.36	0	0.00%
	Total Share Capital	530.36	530.36	0	0
	Reserves and Surplus	42864.41	45,410.73	2546.32	5.94%
	Total Reserves and Surplus	42864.41	45,410.73	2546.32	5.94%
	Total Share Holders Funds	43394.77	45941.1	2546.33	0.058678269
	Equity Share application money	0	5,042.00	5042	0.00%
	Deposits	591314.82	6,38,689.72	47374.9	8.01%
	Borrowings	62571.97	67,201.30	4629.33	7.40%
	Other Liabilities and Provisions	22718.21	24,113.29	1395.08	6.14%
	Total Capital and Liabilities	719999.77	780987.4	60987.63	0.084705069
ASSETS	Cash and Balances with Reserve Bank of India	22699.64	26,661.73	3962.09	17.45%
	Balances with Banks Money at Call and Short Notice	70197.74	62,567.89	-7629.85	-10.87%
	Investments	163184.53	1,82,298.08	19113.55	11.71%
	Advances	427431.83	4,68,818.74	41386.91	9.68%
	Fixed Assets	5367.39	6,990.30	1622.91	30.24%
	Other Assets	31118.64	33,650.68	2532.04	8.14%
	Total Assets	719999.77	780987.4	60987.63	0.084705069

BANK OF BARODA COMPARATIVE BALANCE SHEET YEAR: 2019 AND 2020

CATEGORY	PARTICULARS	AMOUNT IN 2019	AMOUNT IN 2020	CHANGE IN ABSOLUTE AMOUNT	CHANGE IN PERCENTAGE %
EQUITIES AND LIABILITIES	Equity Share Capital	530.36	925.37	395.01	74.48%
	Total Share Capital	530.36	925.37	395.01	74.48%
	Reserves and Surplus	45,410.73	70,930.84	25520.11	56.20%
	Total Reserves and Surplus	45,410.73	70,930.84	25520.11	56.20%
	Total Share Holders Funds	45,941.10	71,856.22	25,915.12	56.41%
	Equity Share application money	5,042.00		-5042	-100.00%
	Deposits	6,38,689.72	9,45,984.43	307294.71	48.11%
	Borrowings	67,201.30	93,069.31	25868.01	38.49%
	Other Liabilities and Provisions	24,113.29	47,005.56	22892.27	94.94%
	Total Capital and Liabilities	7,80,987.40	11,57,915.52	3,76,928.12	48.26%
ASSETS	Cash and Balances with Reserve Bank Of India	26,661.73	32,645.85	5984.12	22.44%
	Balances with Banks Money at Call and Short Notice	62,567.89	89,255.27	26687.38	42.65%
	Investments	1,82,298.08	2,74,614.61	-93042.81	-51.04%
	Advances	4,68,818.74	6,90,120.73	-194204.13	-41.42%
	Fixed Assets	6,990.30	8,889.29	683130.43	9772.55%
	Other Assets	33,650.68	62,389.76	-24761.39	-73.58%
	Total Assets	7,80,987.40	11,57,915.52	-7,18,597.64	-92.01%

BANK OF BARODA COMPARATIVE BALANCE SHEET YEAR: 2020 AND 2021

CATEGORY	PARTICULARS	AMOUNT IN 2020	AMOUNT IN 2021	CHANGE IN ABSOLUTE AMOUNT	CHANGE IN PERCENTAGE %
EQUITIES AND LIABILITIES	Equity Share Capital	925.37	1,035.53	110.16	11.90%
	Total Share Capital	925.37	1,035.53	110.16	0.12
	Reserves and Surplus	70,930.84	76,010.19	5079.35	7.16%
	Total Reserves and Surplus	70,930.84	76,010.19	5079.35	7.16%
	Total Share Holders' Funds	71,856.22	77,045.72	5,189.50	0.07
	Equity Share application money	0	0	0	0
	Deposits	9,45,984.43	9,66,996.93	21012.5	2.22%
	Borrowings	93,069.31	66,847.93	-26221.38	-28.17%
	Other Liabilities and Provisions	47,005.56	44,474.19	-2531.37	-5.39%
	Total Capital and Liabilities	11,57,915.52	11,55,364.77	-2,550.75	0.00
ASSETS	Cash and Balances with Reserve Bank of India	32,645.85	38,841.04	6195.19	18.98%
	Balances with Banks Money at Call and Short Notice	89,255.27	81,571.78	-7683.49	-8.61%
	Investments	2,74,614.61	2,61,220.27	-13394.34	-4.88%
	Advances	6,90,120.73	7,06,300.51	16179.78	2.34%
	Fixed Assets	8,889.29	8,016.24	-873.05	-9.82%
	Other Assets	62,389.76	59,414.93	-2974.83	-4.77%
	Total Assets	11,57,915.52	11,55,364.77	-2,550.75	0.00

BANK OF BARODA COMPARATIVE BALANCE SHEET YEAR: 2021 AND 2022

CATEGORY	PARTICULARS	AMOUNT IN 2021	AMOUNT IN 2022	CHANGE IN ABSOLUTE AMOUNT	CHANGE IN PERCENTAGE %
EQUITIES AND LIABILITIES	Equity Share Capital	1,035.53	1,035.53	0.00	0.00%
	Total Share Capital	1035.53	1035.53	0	0
	Reserves and Surplus	76,010.19	84,874.19	8,864.00	11.66%
	Total Reserves and Surplus	76,010.19	84,874.19	8,864.00	11.66%
	Total Share Holders Funds	77,045.72	85,909.72	8,864.00	0.12
	Equity Share application money	0	0	0	0
	Deposits	9,66,996.93	10,45,938.56	78,941.63	8.16%
	Borrowings	66,847.93	1,03,899.29	37,051.36	55.43%
	Other Liabilities and Provisions	44,474.19	42,252.27	-2,221.92	-5.00%
	Total Capital and Liabilities	11,55,364.77	12,77,999.83	1,22,635.06	0.11
ASSETS	Cash and Balances with Reserve Bank of India	38,841.04	55,184.41	16,343.37	42.08%
	Balances with Banks Money at Call and Short Notice	81,571.78	67,470.59	-14,101.19	-17.29%
	Investments	2,61,220.27	3,15,795.39	54,575.12	20.89%
	Advances	7,06,300.51	7,77,155.18	70,854.67	10.03%
	Fixed Assets	8,016.24	9,921.90	1,905.66	23.77%
	Other Assets	59,414.93	52,472.37	-6,942.56	-11.68%
	Total Assets	11,55,364.77	12,77,999.83	1,22,635.06	0.11

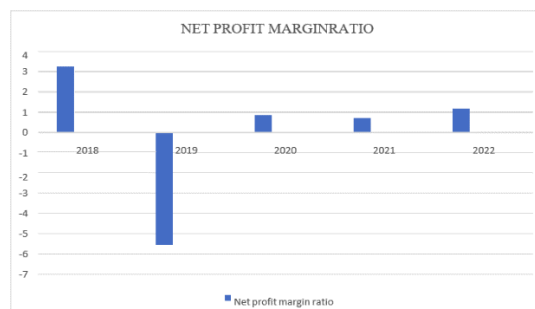
RATIO ANALYSIS**1. PROFIT MARGIN****1. NET PROFIT MARGIN RATIO:**

Net profit margin is calculated by dividing earnings after taxes (EAT) by net revenue, and multiplying the total by 100%. The higher the ratio, the more cash the company has available to distribute to shareholders or invest in new opportunities.

TableNo.4.3 Net Profit Margin Ratio (Rupees in crores)

Year	Ratio	Increase/Decrease
2018	3.27	-
2019	-5.57	-2.3
2020	0.87	4.7
2021	0.71	-0.16
2022	1.17	0.46

Source: Annual Report of Bank of Baroda



Graph4.3 Net Profit Margin Ratio

INTERPRETATION

The net profit margin ratio trend for the given years shows that the company did not generate any net profit in 2018, but was able to improve its profitability in 2019 and 2020. However, the ratio declined significantly in 2021, indicating potential financial challenges that the company may have faced during the year. The slight improvement in 2022 suggests that the company is working to recover its profitability, but it still has room for improvement. Overall, a higher net profit margin ratio indicates better profitability, while a lower ratio indicates weaker profitability.

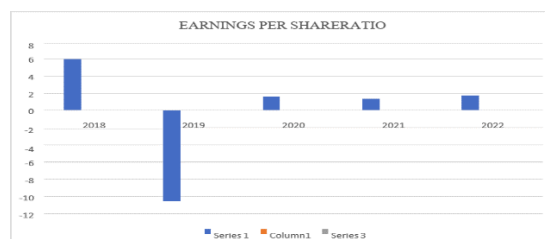
2. EARNINGS PER SHARE RATIO

Earnings per share (EPS) is a company's net profit divided by the number of common shares it has outstanding. EPS indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value.

TableNo.4.4 Earnings Per Share Ratio (Rupees in crores)

Year	Ratio	Increase/ Decrease
2018	6.00	-
2019	-10.53	-4.53
2020	1.64	8.89
2021	1.36	-0.28
2022	1.78	0.42

Source: Annual Report of Bank of Baroda



Graph4.4 Earnings Per Share Ratio

INTERPRETATION

The earnings per share (EPS) ratio trend for the given years shows that the company did not generate any net income attributable to its common stock in 2018, but was able to generate a significant amount of net income in 2020. However, the ratio turned negative again in the following years, indicating that the company incurred net losses that were greater than the total number of outstanding shares of its common stock. This suggests that the company's financial performance weakened during those periods. Overall, a positive EPS ratio indicates that the company generated net income attributable to its common stock, while a negative EPS ratio indicates that the company incurred a net loss attributable to its common stock.

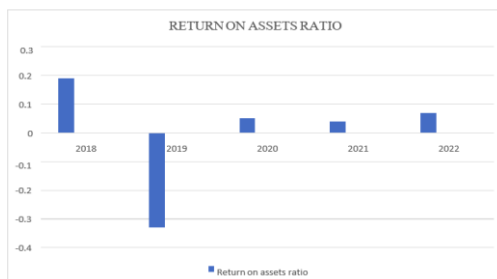
3. RETURN ON ASSETS RATIO

The return on total assets ratio is obtained by dividing a company's earnings after tax by its total assets. This profitability indicator helps you determine how your company generates its earnings and how you compare to your competitors.

TableNo.4.5 Return on Assets Ratio(Rupees in crores)

Year	Ratio	Increase/ Decrease
2018	0.19	-
2019	-0.33	-0.13
2020	0.05	0.28
2021	0.04	-0.01
2022	0.07	0.03

Source: Annual Report of Bank of Baroda



Graph4.5 Return on Assets Ratio

INTERPRETATION

The return on assets (ROA) ratio trend for the given years indicates that the company did not generate any profits from its assets in 2018 and 2019. However, the ratio improved in 2020 and turned slightly positive in 2021, indicating that the company was able to improve its efficiency in using its assets to generate profits. However, the ratio decreased slightly in 2022, suggesting that the company's asset utilization efficiency weakened during the year. Overall, a higher ROA ratio indicates better asset utilization efficiency and profitability, while a lower ratio suggests weaker performance in these areas.

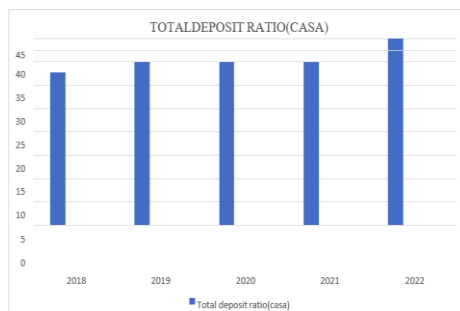
4. TOTAL DEPOSIT RATIO:

To calculate the loan-to-deposit ratio, divide a bank's total amount of loans by the total amount of deposits for the same period. You can find the figures on a bank's balance sheet. Loans are listed as assets while deposits are listed as liabilities.

TableNo.4.8 Total Deposit Ratio(Rupees in crores)

Year	Ratio	Increase/ Decrease
2018	32.15	-
2019	35.81	3.66
2020	35.03	-0.78
2021	35.28	0.25
2022	40.15	4.87

Source: Annual Report of Bank of Baroda



Graph4.8 Total Deposit Ratio

INTERPRETATION

The total deposit ratio trend for the given years shows a mixed outcome. The company had a substantial increase in total

deposits in 2019 and 2022, but had negative total deposits in 2020. A higher total deposit ratio indicates that the company has a larger proportion of deposits relative to its total assets, which can help increase, its liquidity and ability to lend to customers.

TREND ANALYSIS YEAR: 2018-2022

PARTICULARS	AMOUNT					TREND PERCENTAGES				
	YEAR2018	YEAR2019	YEAR2020	YEAR2021	YEAR2022	YEAR 2018	YEAR 2019	YEAR 2020	YAER 2021	YEAR 2022
EQUITIES AND LIABILITIES										
SHAREHOLDERS' FUNDS:										
Equity Share Capital	530.36	530.36	925.37	1,035.53	1,035.53	100.00	100.00	174.48	195.25	195.25
Total Share Capital	530.36	530.36	925.37	1,035.53	1,035.53	100.00	100.00	174.48	195.25	195.25
Reserves and Surplus	42,864.41	45,410.73	70,930.84	76,010.19	84,874.19	100.00	105.94	165.48	177.33	198.01
Total Reserves and Surplus	42,864.41	45,410.73	70,930.84	76,010.19	84,874.19	100.00	105.94	165.48	177.33	198.01
Total Shareholders Funds	43,394.77	45,941.10	71,856.22	77,045.72	85,909.72	100.00	105.87	165.59	177.55	197.97
Equity Share application money	0	5,042.00	0	0	0	0	0	0	0	0
Deposits	5,91,314.82	6,38,689.72	9,45,984.43	9,66,996.93	10,45,938.56	100.00	108.01	159.98	163.53	176.88
Borrowings	62,571.97	67,201.30	93,069.31	66,847.93	1,03,899.29	100.00	107.40	148.74	106.83	166.05
Other Liabilities and Provisions	22,718.21	24,113.29	47,005.56	44,474.19	42,252.27	100.00	106.14	206.91	195.76	185.98
Total Capital and Liabilities	7,19,999.77	7,80,987.40	11,57,915.52	11,55,364.77	12,77,999.83	100.00	108.47	160.82	160.47	177.50
ASSETS										
Cash and Balances With Reserve Bank of India	22,699.64	26,661.73	32,645.85	38,841.04	55,184.41	100.00	117.45	143.82	171.11	243.11
Balances with Banks Money at Call and Short Notice	70,197.74	62,567.89	89,255.27	81,571.78	67,470.59	100.00	89.13	127.15	116.20	96.12
Investments	1,63,184.53	1,82,298.08	2,74,614.61	2,61,220.27	3,15,795.39	100.00	111.71	168.28	160.08	193.52
Advances	4,27,431.83	4,68,818.74	6,90,120.73	7,06,300.51	7,77,155.18	100.00	109.68	161.46	165.24	181.82
Fixed Assets	5,367.39	6,990.30	8,889.29	8,016.24	9,921.90	100.00	130.24	165.62	149.35	184.86
Other Assets	31,118.64	33,650.68	62,389.76	59,414.93	52,472.37	100.00	108.14	200.49	190.93	168.62
Total Assets	7,19,999.77	7,80,987.40	11,57,915.52	11,55,364.77	12,77,999.83	100.00	108.47	160.82	160.47	177.50

INTERPRETATION

The trend analysis shows the percentage change in various categories of a company's financial statements over a period of years. The interpretation involves analyzing the trend percentages to identify patterns or changes in the company's financial performance, such as increases or decreases in revenue, profitability, assets, liabilities, and shareholder equity. It can help in identifying potential areas of concern and opportunities for improvement.

FINDINGS

- The trend in the current ratio shows that the bank's ability to meet its short-term obligations has weakened over time, particularly in 2020 and 2022. This trend could indicate potential financial challenges that the bank may face in the near future, and it may need to take measures to improve its current ratio in order to strengthen its financial position.
- The trend in the quick ratio shows that the bank's ability to pay off its short-term obligations using its quick assets was very strong in 2018 and 2019, but weakened significantly in 2020 before improving in 2021 and 2022. While the bank may have faced some financial challenges in 2020, it appears to have taken steps to improve its quick ratio in the following years.
- The trend in the net profit margin ratio shows that the bank generated very little or no net profit in 2018, but was able to improve its profitability in the following years, particularly in 2020. However, the ratio declined significantly in 2021, indicating potential financial challenges that the bank may have faced during the year. The slight improvement in 2022 suggests that the bank is working to recover its profitability, but it still has room for improvement. In general, a higher net profit margin ratio indicates better profitability, and a lower ratio indicates weaker profitability.
- The trend in the EPS ratio shows that the bank did not generate any net income attributable to its common stock in 2018, but was able to generate a significant amount of net income in 2020. However, the ratio turned negative again in the following years, suggesting that the bank's financial performance weakened during those periods. In general, a positive EPS ratio indicates that the bank generated net income attributable to its common stock, while a negative EPS

ratio indicates that the bank incurred a net loss attributable to its common stock.

- The trend in the ROA ratio shows that the bank was not able to generate any profits from its assets in 2018 and 2019. However, the ratio improved in 2020 and turned slightly positive in 2021, indicating that the bank was able to improve its efficiency in using its assets to generate profits. However, the ratio decreased slightly in 2022, suggesting that the bank's asset utilization efficiency weakened during the year. A higher ROA ratio indicates that the bank is able to generate more profits from its assets, while a lower ratio suggests that the bank's asset utilization efficiency is weaker.
- The trend in the NIM ratio shows that the bank was able to maintain its profitability from its interest-earning assets in 2019 and 2020, but experienced a significant decline in profitability in 2021 and 2022. A higher NIM ratio indicates better profitability from interest-earning assets, while a lower ratio suggests weaker performance in generating profits from those assets relative to the bank's interest-bearing liabilities.
- The trend in the NII ratio suggests that the bank experienced a mix of positive and negative outcomes in its interest income and expenses management during the given years. The bank earned substantial interest income from its interest-earning assets in 2020, but experienced negative net interest income in 2019 and 2022. A higher NII ratio indicates better interest income management, while a lower ratio suggests weaker management in generating interest income and managing interest expenses.
- The trend in the total deposit ratio suggests that the bank had a mixed performance in terms of its deposit-taking and asset management during the given years. The bank had a substantial increase in total deposits in 2019 and 2022, but experienced negative total deposits in 2020. A higher total deposit ratio indicates that the bank has a larger proportion of deposits relative to its total assets, which can help increase its liquidity and ability to lend to customers.
- The trend in Return On Capital Employed ratio (ROCE) indicates that the bank struggled to generate profits from its capital investments during the given years, with a significant drop in 2021. This could be due to various factors such as an increase in expenses or a decrease in revenue. A higher ROCE indicates that the bank is more efficient in generating profits from its capital investments, which can be a positive indicator for investors.

CONCLUSION

From the above discussion it is concluded that the bank's financial performance can be maximized by increasing the Net profit margin, Earnings per share, Return on Asset employed and Interest income. The Indian Banking Industry is the fastest growing Industry and to survive in the cut throat competition the Bank of Baroda needs to be financially sound.

Bank of Baroda has shown improvement in its financial performance over the past few quarters, as reflected by its increasing net profits and improving asset quality. The bank's profitability ratios, such as return on assets and return on equity, have improved over the past year, indicating that the bank is generating more profit from its assets and equity. Bank of Baroda's liquidity position is strong, as reflected by its current ratio and quick ratio, which are above the industry average. The bank has a significant exposure to bad loans, which has impacted its financial performance in the past. However, the bank has been taking steps to reduce its non-performing assets and improve its asset quality. Bank of Baroda has a significant international presence, which has contributed to its revenue and profits. The bank has been expanding its operations in key international markets to diversify its revenue sources. The banking industry and the broader economic environment have a significant impact on Bank of Baroda's financial performance. Factors such as interest rates, regulatory changes, and technological advancements can affect the bank's profitability and growth prospects.

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