

## A CASE STUDY OF MERGER OF BENARAS STATE BANK LTD. (BSB) WITH BANK OF BARODA (BOB)

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### ABSTRACT

*Dis-intermediation and competition have forced banks to look for new ways to boost their returns. One of the routes adopted by banks is that of consolidation. Mergers and acquisitions have been used to expand revenues and cut costs. Consolidation of banks through Mergers and Acquisitions is not a new phenomenon for the Indian banking system. It has been going on from the early days of modern banking when three Presidency banks merged in to form of the Imperial Bank of India in 1921. The study has been undertaken to make a comparison of the performance of BSB and BOB prior and after the merger on the basis of various financial ratios. All efforts are towards judging whether merger of banks have been fruitful or not and benefit of synergies has been obtained or not. For the purpose of analysis ratio of four years prior to merger and four years after merger have been compared. The analysis of financial ratios shows that efficiency has increased after the merger of BOB and BSB. Improvement has been observed after merger in total income to total capital ratio, interest income to interest expenditure ratio, net profit to total capital ratio, advances to deposits ratio and advances to total assets ratio. Poor performance has been observed in the case of deposits to total assets ratio, deposits to investments ratio, fixed asset to total assets, total income to total assets ratio and net profit to total assets ratio.*

**Keywords:** Merger, acquisition, capital, deposits, investments, advances, fixed assets, interest earned, interest paid, total income, total expenditure, net profit and total assets

### INTRODUCTION

#### Objective of the Study

To review the performance of the performance of BSB and BOB prior and after the merger on the basis of various financial ratios, because financial ratios are powerful tools which help in identifying financial strengths and weaknesses of an institution? In the analysis, year-wise ratio has been compared with overall average ratio of the period under study.

#### Data Used

The present study is based on secondary data published by the Reserve Bank of India, Annual Report of Public Sector Banks, Trend and Progress of Banking in India, Study Reports of various Committees setup by Government of India etc. Data have also been collected from the websites of various government and non-government agencies.

#### Ratio Analysis

Ratio analysis is regarded as one of the best tools in analyzing and comparing the time series accounting data of different firms. That is why; it has been used in the present study. Eleven ratios computed in order to analyze the effectiveness of merger and acquisition in Indian banking. The ratios have been employed in this study are:

i) Deposits to Total Assets Ratio, ii) Deposits to Investment Ratio, iii), Fixed Assets to Total Assets Ratio, iv) Total Income to Total Assets Ratio, v) Total Income to Total Capital Ratio, vi) Interest Income to Interest Expenditure Ratio, vii) Profit to Total Assets Ratio, viii) Profit to Total Capital Ratio, ix) Advances to Deposits Ratio, and x) Advances to Total Assets Ratio.

### **BANK OF BARODA (BOB)**

Maharajah of Baroda Sir Sayajirao Gaekwad III founded the bank on July 20, 1908 in the princely state of Baroda, in Gujarat. The bank, along with 13 other major commercial banks of India, was nationalized on 19 July 1969. The bank has been ranked 283rd biggest bank in the world by The Bankers (June 2009), London. Its total global business was Rs. 7,003.30 billion as of 30 Sep 2012. Its headquarter is in Vadodara and corporate headquarter is in Bandra Kurla Complex Mumbai.

### **BANARES STATE BANK (BSB)**

Banaras State Bank (BSB) Established in 1946 promoted by the Maharaja of Banaras. It was converted into a public limited company with 3 branches in Varanasi. In 1964 Bareilly Bank Ltd. with 7 branches was merged with this bank. The bank also took over the Lucknow Bank Ltd. in 1968. Banaras State Bank had 105 branches, out of which 91 are in Uttar Pradesh. It had a total staff of 1,400. The Banaras State Bank was in loss consecutively for last three years when merger took place on 20.06.2002 and turned insolvent with negative net worth and negative capital adequacy and finally the BOB has taken over 105 branches of BSB under the directive of RBI & Government of India with the objective of safeguarding the interest of depositors of BSB. As at that point of time most banks in India were trying to expand their customer base and thereby increase the consumer banking business. Banaras State Bank helped Bank of Baroda in this aspect.

### **Main Reasons/ Motives of Merger**

1. RBI merged sick bank with healthy bank to protect depositor's interests.
2. Productivity per employee of Banaras State Bank was low.
3. BSB had a negative net worth and negative capital adequacy.
4. Mismanagement led to insolvency of Banaras State Bank.

### **Financials of the Banaras State Bank Ltd. and Bank of Baroda at the time of Merger (2001-02)**

<i>S. No.</i>	<i>Financial Indicators of Banks</i>	<i>Banaras State Bank Ltd. (Rs. in crore)</i>	<i>Bank of Baroda (Rs. in crore)</i>
1.	Capital	0062.10	00294.33
2.	Deposits	1031.93	53985.78
3.	Investments	0630.90	19857.11
4.	Advances	0229.96	27420.67
5.	Total assets	1134.58	63321.98
6.	Net Profit	(-) 0013.38	00274.66

Source: Compiled from Balance Sheet of Respective Banks.

## 1. Deposits to Total Assets Ratio

Table 1 shows deposits to total assets ratio of BOB and BSB during the period under the review. The table reveals that the average value of deposits to total assets ratio is 86%. It is clear from the Table that the deposits to total assets ratio is higher than average value in the year 2000, 2002, 2003, 2004 and 2005 while deposits to total assets ratio is lower than average value in year 1998, 1999, 2001 and 2006. The deposits to total assets ratio is the highest in 2000 i.e. 88 % while deposits to total assets ratio is the lowest in 2006 i.e. 83 %. The deposits to total assets ratio is equal and higher than average value during after merger period except in 2006 whereas it is lower than average value during before merger period except in 2000. With regard to deposits to total assets ratio, it has found that the performance of bank has increased after merger except 2006.

Figure 1 shows a highly fluctuating trend of deposits to total assets ratio. It increases sharply in 2000 and it declines sharply in 2001 after that it begins to grow in 2002. The curve of deposits to total assets ratio declines continuously after 2003.

## 2. Deposits to Investment Ratio

Table 2 presents deposits to investments ratio of BOB and BSB during the study period. The average value of deposits to investments ratio is 252 %. It is clear from the Table that the deposits to investments ratio is higher than average value throughout the study period except in 2003, 2004 and 2005. The deposits to investments ratio is the highest in 1998 while deposits to investments ratio is the lowest in 2004. It has been found that the deposit to investments ratio is higher than average value during pre merger period whereas it is lower than average value during post merger period except in 2006. With regard to deposits to investment ratio, it has observed that the bank has shown poor performance during post merger period.

Figure 2 shows a curve of deposits to investments ratio. The curve of deposits to investments ratio shows that there is decreasing trend till 2004 after that it begins to rise continuously.

## 3. Fixed Assets to Total Assets Ratio

Table 3 demonstrates fixed assets to total assets ratio of BOB and BSB during the study period. The Table clearly discloses that the average value of fixed assets to total assets ratio is 1.01 %. The fixed assets to total assets ratio is higher than average value in the year 1998, 1999, 2000 and 2001 while fixed assets to total assets ratio is lower than average value in year 2002, 2003, 2004, 2005 and 2006. The fixed assets to total assets ratio is the highest in 1998 while fixed assets to total assets ratio is the lowest in 2006. It has been found that the fixed assets to total assets ratio is equal and higher than average value during pre merger period whereas it is lower than average value during post merger period. With regard to the fixed asset to total assets ratio, it has found that the ratio of fixed asset to total assets is lower during post merger period.

Figure 3 shows a curve of fixed assets to total assets ratio during the period under study. The curve of fixed assets to total assets ratio indicates a decreasing trend over the period except 2004.

## 4. Total Income to Total Assets Ratio

Table 4 exhibits total income to total assets ratio of BOB and BSB during the period of study. The Table shows that the average value of total income to total assets ratio is 9%. Further, the total income to total assets ratio is higher than average value in the year 1998 to 2003 while total income to total assets ratio is lower than average value in year 2004 to 2006. The total

income to total assets ratio is the lowest in 2006. The total income to total assets ratio is equal to average in 1998 to 2003. Moreover, the total income to total assets ratio is higher than average value during pre merger period whereas it is lower than average value during post merger period. It has found that performance is poor after merger.

Figure 4 shows a curve of total income to total assets ratio over a study period. The curve of total income to total assets ratio shows a decreasing trend. It is constant till 2003 after that it starts to decline continuously.

### **5. Total Income to Total Capital Ratio**

Table 5 illustrates total income to total capital ratio of BOB and BSB during the study period. The average value of total income to total capital ratio is 2037%. The total income to total capital ratio is higher than average value in the year 2002, 2003, 2004, 2005 and 2006 while total income to total capital ratio is lower than average value in year 1998, 1999, 2000 and 2001. The total income to total capital ratio is the highest in 2003 while total income to capital ratio is the lowest in 1998. It has been found that the total income to total capital ratio is higher than average value during post merger period. Whereas it is lower than average value during before merger period which indicates the good performance during after merger period.

Figure 5 shows a curve of total income to total capital ratio which indicates the increasing trend. The curve shows a continuous increasing trend till 2004 after that it declines in 2005 and it again begins to rise.

### **6. Interest Income to Interest Expenditure Ratio**

Table 6 portrays interest income to interest expenditure ratio of BOB and BSB during the period under review. The Table reveals that the average value of interest income to interest expenditure ratio is 159%. The interest income to interest expenditure ratio is higher than average value in the year 2004, 2005 and 2006 while interest income to interest expenditure is lower than average value in the year 1998, 1999, 2000, 2001, 2002 and 2003. The total income to total assets ratio is the highest in 2005 while interest income to interest expenditure ratio is the lowest in 2002. It has been found that the interest income to interest expenditure ratio is higher than average value after merger whereas it is lower than average value before merger. With regard to the interest income to interest expenditure ratio, the performance has increased during the post merger period.

Figure 6 shows curve of interest income to interest expenditure ratio over a study period. The curve of interest income to interest expenditure ratio is more or less constant till 2003 after that it starts to increase.

### **7. Net Profit to Total Capital Ratio**

The values of net profit to total capital ratio of BOB and BSB are presented in Table 7 the average value of net profit to total capital ratio is 182%. Net profit to total capital ratio is higher than average value in the year 2002, 2003 2004, 2005 and 2006 net profit to total capital ratio is lower than average value in year 1998, 1999, 2000 and 2001. Net profit to total capital ratio is the highest in 2004 while net profit to capital ratio is the lowest in 2001. It has been found that the net profit to total capital ratio is higher than average value after merger whereas it is lower than average value before merger which reflects that the profitability of bank has increased during the post merger period. Figure 7 shows a curve of net profit to total capital ratio. The figure shows fluctuating trend. The curve of net profit to capital ratio decreases till 2000 after that it increases continuously till 2004. Further, it declines in 2005 and starts to rise lastly.

## 8. Net Profit to Total Assets Ratio

Table 8 exhibits net profit to total assets ratio of BOB and BSB during the period under the review. The Table reveals that the average value of net profit to total assets ratio is 0.82 %. The net profit to total assets ratio is higher than average value in the year 1998, 2000, 2003 and 2004 while net profit to total assets ratio is lower than average value in year 1999, 2001, 2002, 2005 and 2006. The net profit to total assets ratio is the highest in 2004 while the net profit to total assets ratio is the lowest in 2001. It has found that the net profit to total assets ratio is higher than average value after merger whereas it is lower than average value before merger except in 1998 and 2000. The above analysis shows that the profitability has not improved during the post merger period.

Figure 8 shows a curve of net profit to total capital ratio. The figure shows fluctuating trend. The curve of net profit to total assets ratio decreases till 2001 after that it increases continuously till 2004. Further, it declines in 2005 and it is constant at last.

## 9. Advances to Deposits Ratio

Table 9 presents advances to deposits ratio of BOB and BSB during the study period. The average value of advances to deposits ratio is 51%. It is clear from the table that the advances to deposits ratio is higher than average value in the year 2002, 2003, 2005 and 2006 while it is lower than average value in the year 1998, 1999, 2000, 2001 and 2004. The advances to deposits ratio is the highest in 2006 while advances to deposits ratio is the lowest in 1999 and 2000. It has been found that the advances to deposits ratio is higher than average value during post merger period except in 2004 whereas it is lower than average value during pre merger period except in 2002. With regard to advances to deposits ratio, it has observed that the bank is able to increase its efficiency during post merger period.

Figure 9 shows a curve of advances to deposits ratio during the period under review. The curve of advances to deposits ratio indicates an increasing trend over a period.

## 10. Advances to Total Assets Ratio

Table 10 displays advances to total assets ratio of BOB and BSB during the study period. The Table shows that the average value of advances to total assets ratio is 44%. It is clear from the table that the advances to total assets ratio is higher than average value in year 2002, 2003, 2005 and 2006. The advances to total assets ratio is the highest in 2006 while advances to total assets ratio is the lowest in 1999. It has found that the advances to total assets ratio is higher than average value during post merger period except in 2004 whereas it is lower than average value during pre merger period. With regard to advances to total assets ratio, it has observed that the bank is able to improve the performance during post merger period.

Figure 10 shows a curve of advances to total assets ratio during the period under study. The curve of advances to total assets ratio indicates an increasing trend over a period.

## CONCLUSION

The analysis of financial ratios shows that efficiency has increased after the merger of BOB and BSB. Improvement has been observed after merger in total income to total capital ratio, interest income to interest expenditure ratio, net profit to total capital ratio, advances to deposits ratio and advances to total assets ratio. Poor performance has been observed in the case of deposits to total assets ratio, deposits to investments ratio, fixed asset to total assets, total income to total assets ratio and net profit to total assets ratio.

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## APPENDIX

**Table 1. Ratio of Deposits to Total Assets of Case Study BOB and BSB**

Year	Deposits (Rs. In Crore)	Total assets (Rs. In Crore)	Deposits to Total Assets Ratio (In %)
1998	39809	046620	85
1999	45398	053106	85
2000	52209	059607	88
2001	55017	064456	85
2002	61804	070910	87
2003	66366	076417	87
2004	72967	085108	86
2005	81333	094664	86
2006	93662	113393	83
Average	63174	073809	86

Source: All data extracted and computed from the annual reports of RBI & IBA

**Table 2. Ratio of Deposits to Investment of Case Study BOB and BSB**

Year	Deposits (Rs. In Crore)	Investments (Rs. In Crore)	Deposits to Investment Ratio (In %)
1998	39809	13704	290
1999	45398	16304	278
2000	52209	19044	274
2001	55017	20488	269
2002	61804	23833	259
2003	66366	30179	220
2004	72967	38018	192
2005	81333	37074	219
2006	93662	35140	267
Average	63174	25976	252

**Table 3. Ratio of Fixed Assets to Total Assets of Case Study BOB and BSB**

<i>Year</i>	<i>Fixed Assets (Rs. In Crore)</i>	<i>Total Assets (Rs. In Crore)</i>	<i>Fixed Assets to Total Assets Ratio (In %)</i>
1998	592	046620	1.27
1999	608	053106	1.14
2000	617	059607	1.04
2001	656	064456	1.02
2002	692	070910	0.98
2003	697	076417	0.91
2004	815	085108	0.96
2005	860	094664	0.91
2006	920	113393	0.81
Average	717	073809	1.01

**Table 4. Ratio of Total Income to Total Assets of Case Study BOB and BSB**

<i>Year</i>	<i>Total Income (Rs. In Crore)</i>	<i>Total Assets (Rs. In Crore)</i>	<i>Total Income to Total Assets Ratio (In %)</i>
1998	4806	046620	10
1999	5488	053106	10
2000	5971	059607	10
2001	6581	064456	10
2002	6949	070910	10
2003	7359	076417	10
2004	7866	085108	9
2005	7744	094664	8
2006	8292	113393	7
Average	6784	073809	9



**Table 5. Ratio of Total Income to Total Capital of Case Study BOB and BSB**

<i>Year</i>	<i>Total Income (Rs. In Crore)</i>	<i>Total Capital (Rs. In Crore)</i>	<i>Total Income to Total Capital Ratio (In %)</i>
1998	4806	355	1354
1999	5488	356	1541
2000	5971	356	1675
2001	6581	356	1847
2002	6949	294	2364
2003	7359	294	2500
2004	7866	294	2671
2005	7744	365	2119
2006	8292	365	2268
Average	6784	337	2037

**Table 6. Ratio of Interest Income to Interest Expenditure of Case Study BOB and BSB**

<i>Year</i>	<i>Interest Income (Rs. In Crore)</i>	<i>Interest Expenditure (Rs. In Crore)</i>	<i>Interest Income to Interest Expenditure Ratio (In %)</i>
1998	4249	2896	147
1999	4901	3314	148
2000	5313	3586	148
2001	5858	3910	150
2002	5956	4076	146
2003	6097	3994	153
2004	6147	3575	172
2005	6431	3452	186
2006	7100	3875	183
Average	5783	3631	159

**Table 7. Ratio of Net Profit to Total Capital of Case Study BOB and BSB**

<i>Year</i>	<i>Net Profit (Rs. In Crore)</i>	<i>Total Capital (Rs. In Crore)</i>	<i>Net Profit to Total Capital Ratio (In %)</i>
1998	459	355	129
1999	401	356	113
2000	497	356	140
2001	261	356	073
2002	546	294	186
2003	772	294	263
2004	967	294	328
2005	677	365	185
2006	827	365	226
Average	601	337	182

**Table 8. Ratio of Net Profit to Total Assets of Case Study BOB and BSB**

<i>Year</i>	<i>Net Profit (Rs. In Crore)</i>	<i>Total assets (Rs. In Crore)</i>	<i>Net Profit to Total Assets Ratio (In %)</i>
1998	459	046620	0.99
1999	401	053106	0.76
2000	497	059607	0.83
2001	261	064456	0.41
2002	546	070910	0.77
2003	772	076417	1.01
2004	967	085108	1.14
2005	677	094664	0.72
2006	827	113393	0.73
Average	601	073809	0.82

**Table 9. Ratio of Advances to Deposits of Case Study BOB and BSB**

<i>Year</i>	<i>Advances (Rs. In Crore)</i>	<i>Deposits (Rs. In Crore)</i>	<i>Advances to Deposits Ratio (In %)</i>
1998	20050	39809	50
1999	21297	45398	47
2000	24624	52209	47
2001	27650	55017	50
2002	33663	61804	54
2003	35348	66366	53
2004	35600	72967	49
2005	43400	81333	53
2006	59912	93662	64
Average	33505	63174	51

**Table 10. Ratio of Advances to Total Assets of Case Study BOB and BSB**

<i>Year</i>	<i>Advances (Rs. In Crore)</i>	<i>Total Assets (Rs. In Crore)</i>	<i>Advances to Total Assets Ratio (In %)</i>
1998	20050	046620	43
1999	21297	053106	40
2000	24624	059607	41
2001	27650	064456	43
2002	33663	070910	47
2003	35348	076417	46
2004	35600	085108	42
2005	43400	094664	46
2006	59912	113393	53
Average	33505	073809	44

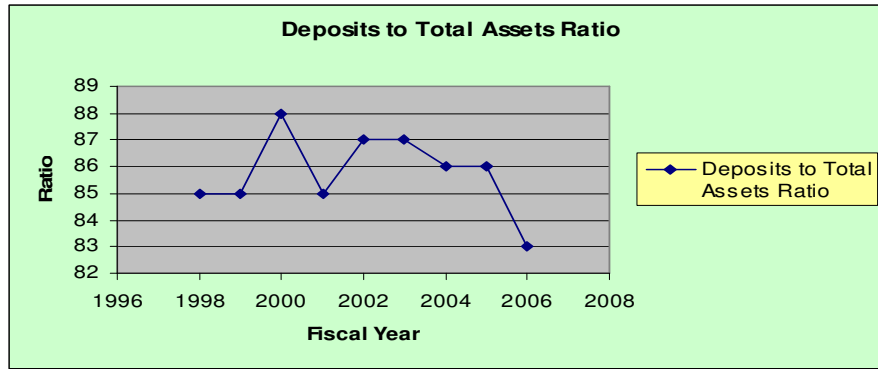


Figure 1. Deposits to Total Assets Ratio of Case Study III

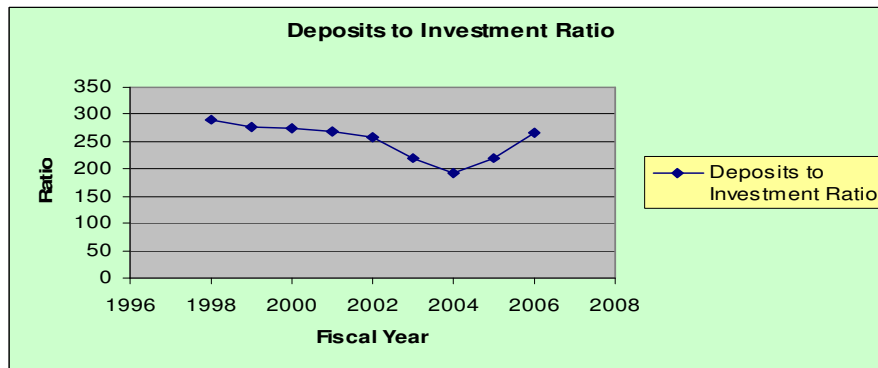


Figure 2. Deposits to Investments Ratio of Case Study III

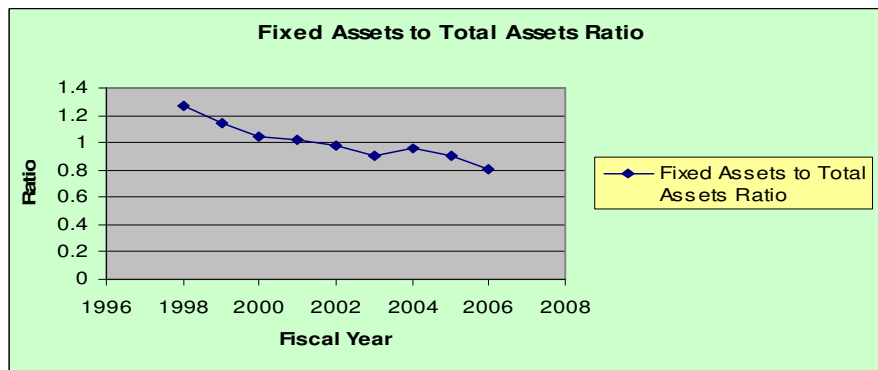


Figure 3. Fixed Assets to Total Assets Ratio of Case Study III

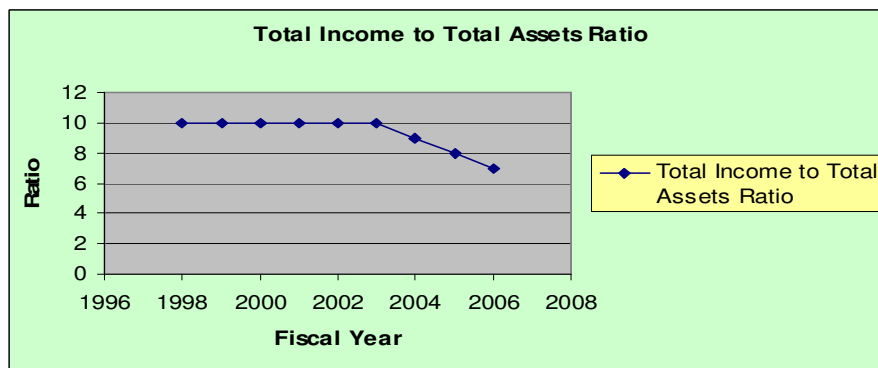


Figure 4. Total Income to Total Assets Ratio of Case Study III

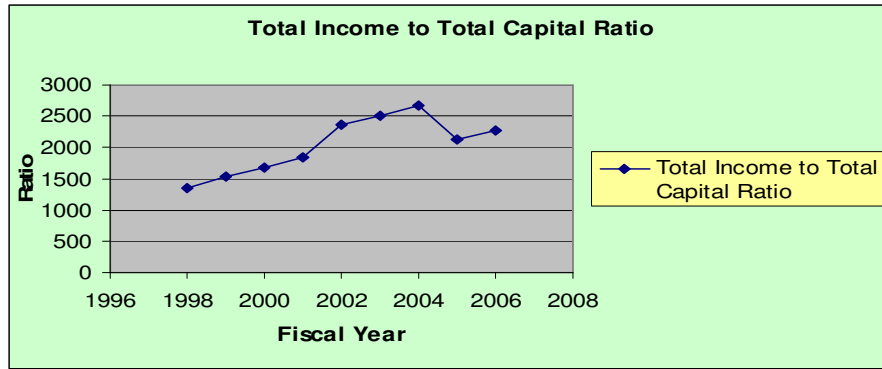


Figure 5. Total Income to Total Capital Ratio of Case Study III

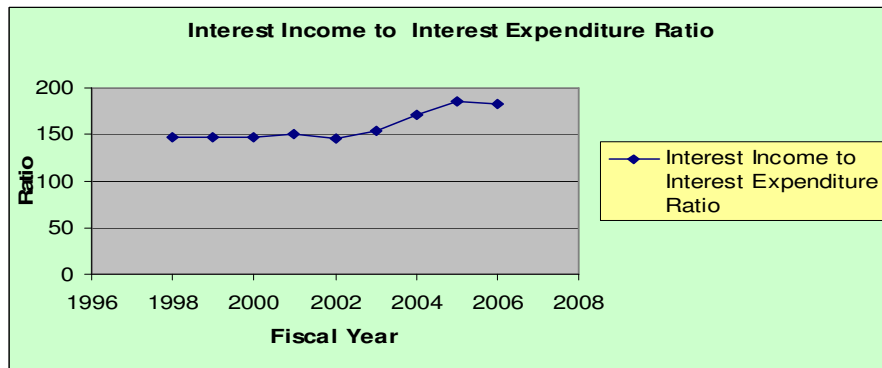


Figure 6. Interest Income to Interest Expenditure Ratio of Case Study III

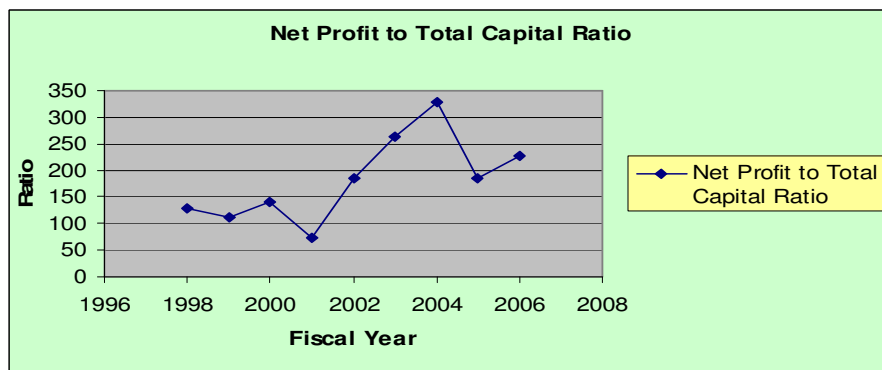


Figure 7. Net Profit to Total Capital Ratio of Case Study III

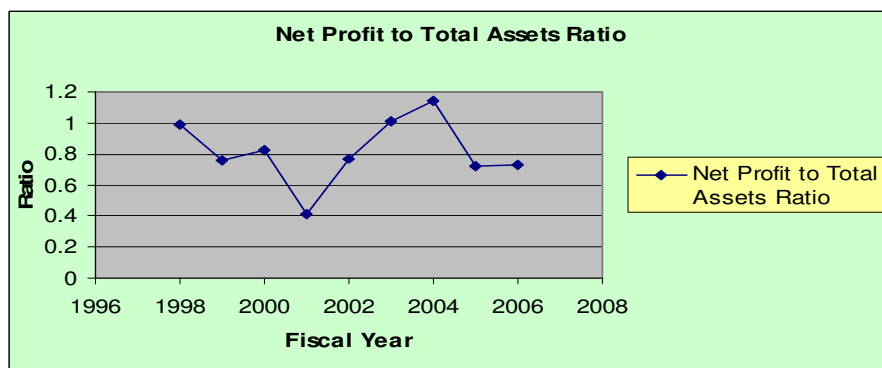


Figure 8. Net Profit to Total Assets Ratio of Case Study III

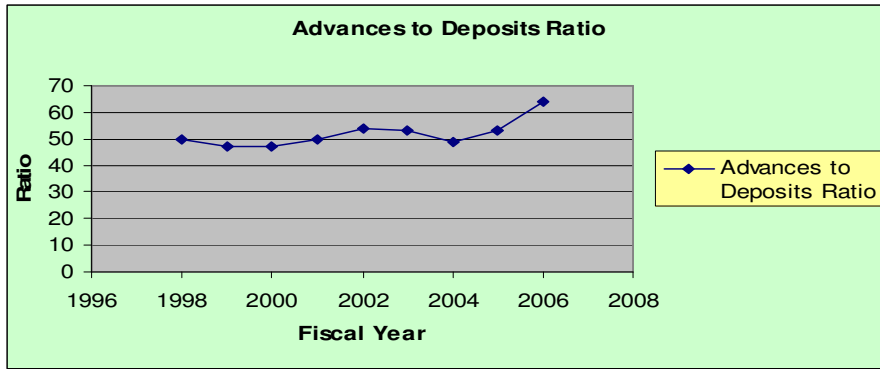


Figure 9. Advance to Deposits Ratio of Case Study III

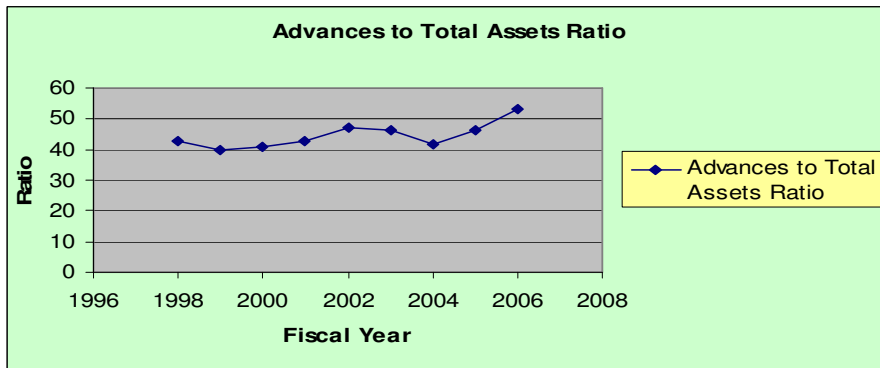


Figure 10. Advances to Total Assets Ratio of Case Study III