

A Fundamental Analysis of Public Sector Banks in India

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Abstract

Industrialization is necessary for the rapid economic growth which implies a long term rise in per capita of nation. It requires huge investment which is possible if saving is sound and investor are willing to take common market risk. Large chunk of permanent investment of a company depend upon equity shares and its intrinsic value depends on overall economic factor. The profitability of the company, the growth rate and the risk exposure has a direct impact on the price of the share. These factors further rely on other factors like economic environment in which company operate, the industry they belong to, and finally it overall performance. The liberalization of an Indian economy explored the market potential and due to which Indian banking sector has been witnessing tremendous changes in terms of new product and services and overall stiff competition from domestic and global private sector banking players. The new highbred IPO's that have been taking place in banking sector are amazing. In the light of these ever-growing developments a careful analysis of the profitability of Indian banking sector is inevitable. The presents study attempts to analyze the profitability of five major public sector banks in India: SBI, PNB, BOI, BOI, and Canara Bank. The variable taken for the study are Earning Per Share (EPS), Operating Profit Margin (OPM), Net Profit Margin (NPM), Debt Equity Ratio (DER), Return on Equity (ROE), Price Earning Ratio (PER) and Return on Assets (ROA). This study brings out the competitiveness effectiveness of five major banks.

Keywords: SBI, PNB, BOI, BOB, CB, EPS, OPM, NPM, DER, ROE, PER, ROA, IPO, RBI, SCBs, PSBs, NPAs, ATMs, NSE, CAGR,

1. Introduction

1.1 Objective

The Main objective of the study is to investigate the risk involved in investment and to develop rational and scientific investment pattern through investigative evaluation of past and expected future performance of the companies, industries and the economy as a whole. For making any investment have to analyze the profitability position of the respective companies which requires scientific knowledge of evaluating intrinsic value of a firm; practical exposure of financial analysis of an enterprise and to get familiarity of scheming comparative efficiency of different firms

2. Methodology

The study is done with special reference to public sector banks. For the purpose analytical and descriptive research design basing on convenience sampling' has been adopted. The selection of sample companies is made on the basis of market capitalization. The data of the sample companies (for a period of five years from 2004-05 to 2008-09) have been collected from the websites published annual reports and the balance sheet of the companies. A finite sample size of five banks listed on the National Stock Exchange (NSE) has been selected for the purpose

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of the study. They are State Bank of India (SBI), Punjab National Bank (PNB), Bank of India (BOI), Bank of Baroda (BOB) and Canara Bank (CB).

3.

3.1 Tools used for analysis:

Ratio Analysis: Ratios have been calculated for past five years for the purpose of analysis. Ratios being designed are named as:

Earning Per Share (EPS), Operating Profit Margin (OPM), Net Profit Margin (NPM), Debt Equity Ratio (DER), Return on Equity (ROE), Price Earning Ratio (PER) and Return on Assets (ROA).

3.2 Analysis of Variance (ANOVA): The statistical tool that is used for testing hypothesis is one-way Analysis of Variance (ANOVA)

Hypothesis: The following hypotheses have been taken to put on test:

H1: The Earning Per Share (EPS) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H2: The Operating Profit Margin (OPM) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H3: The Net Profit Margin (NPM) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H4: The Debt Equity Ratio (DER) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H5: The Return on Equity (ROE) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H6: The Price Earning Ratio (PER) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

H7: The Return on Assets (ROA) position of SBI, PNB, BOI, BOB and CB does not differ significantly.

4. Introduction to Indian banking industry

The past five decades witness cataclysmic change in the sphere of commercial banking all over the world. Indian banking system has also followed the same trend to match the global standards. Indian banking was evolved basically to meet the financial need of the industry. The constituents of the present banking system in India have been varying origin and sizes. At the apex is the Reserve banks of India, the Central bank of the country followed by State bank of India, major nationalize scheduled banks, other joint stock banks, co-operatives banks, Regional rural Banks. Thus, the banking sector in India comprises the public sector commercial banks, private sector banks, co-operative banks and regional rural banks.

Commercial banking system, existing in India, can be split into scheduled and non scheduled banks. Scheduled banks constitute of commercial banks and co-operative banks. There are about 76003 branches of Scheduled banks spread across India. During the first phase of financial reforms, there was a nationalization of 14 major banks in 1969. This crucial step led to a shift from Class banking to Mass banking. Since then the growth of the banking industry in India has been a continuous process. It was the outcome of the Government policy to penetrate un-banked areas of the country which lead unprecedented expansion of banking operations in India particularly during the post nationalization period.

By the expansion of Indian banking system economy in entire nation explored but also suffered some draw back. With growing economy it is noted that the public sector banks (PSBs), which are the foundation of the Indian Banking system account for more than 78 per cent of total banking industry assets. Unfortunately they are burdened with excessive Non Performing Assets (NPAs), massive inefficient manpower and lack of modern technology. On the other hand the Private Sector Banks in India are witnessing immense progress. With the use of modern technology in banking system they became leaders in Internet banking, mobile banking, phone banking, ATMs.

4.1 Structure of the Indian Banking Industry:

- Indian public sector banks account for 75% of the assets; however, Indian private banks and foreign banks are expanding rapidly.
- Standard Chartered Bank, Citibank and HSBC are the three largest foreign banks in India with more than 65% of the total assets of foreign banks
- Most global players in banking & financial services – including Goldman Sachs, Morgan Stanley, Merrill Lynch, JP Morgan, Deutsche Bank, UBS, Lehman Brothers, ABN Amro, Barclays, Calyon etc. - are active in India
- The Mutual Funds industry has both domestic and foreign companies - UTI Mutual Fund, Prudential ICICI, HDFC, Franklin Templeton, Birla and Tata.

Table 1: Structure of the Indian Banking Industry

Classification of Banks (2007)	Number of Banks	Total Assets (US\$ billion)
Public Sector Banks	28	481
Indian Private Banks	27	135
Foreign Banks	29	48
Total	84	664

Source: RBI

4.2 Current scenario of Indian banking industry:

The banking structure prevailing in India is the outcome of a process of expansion, reorganization and consolidation. Prior to nationalization growth of banks was governed purely by economic considerations. However present period witnessed greater emphasis having being accorded on social objectives resulting into widening of branches network and length and breadth of the country leading too emergence of Indian banking system as one of the largest in the world today.

Currently (2010), banking in India is generally fairly mature in terms of supply, product range and reach-even though reach in rural India still remains a challenge for the private sector and foreign banks. Reserve Bank of India being an autonomous body, with minimal pressure from the government is responsible to manage rupee volatility without any fixed exchange rate-and this has mostly been true. In general Indian mass trust public sector banks over private sector in terms of quality of assets and capital adequacy.

With the growth in the Indian economy and in its services sector-the demand for banking services, especially retail banking, mortgages and investment services are expected to be strong. Which will lead to M&As, takeovers, and asset sales. According to a report by ICRA Limited, a rating agency, the public sector banks hold over 75 percent of total assets of the banking industry,

with the private and foreign banks holding 18.2% and 6.5% respectively. Focus of Banks in India is largely on growth with stability, it is expected that the banking industry is slated for growth in future with a more qualitative rather than quantitative approach. The total assets of all scheduled commercial banks by end-March 2010 is projected to touch Rs 40, 90,000 crore. This is going to comprise around 65% of GDP at current market prices as compared to 67% in 2002-03. The bank's assets are estimated to grow at an annual composite rate of growth of 13.4% during the rest of the decade as against 16.7% between 1994-95 and 2002-03. (Indian Business Directory)

Currently, India has 88 scheduled commercial banks (SCBs) - 28 public sector banks (that is with the Government of India holding a stake), 29 private banks (these do not have government stake; they may be publicly listed and traded on stock exchanges) and 31 foreign banks. They have a combined network of over 53,000 branches and 44,000 ATMs, 22 million internet banking users.

4.3 Future Challenge of Indian Banks in Global Competition:

With constant growth and effective structural reforms the Indian banks are hopeful of becoming a global brand as they are the major source of financial sector revenue and profit growth. In comparison to past the financial services penetration in India continues to be healthy, thus the banking industry is also not far behind and growing day by day with confidence. As a result of this, the profit for the Indian banking industry will surely surge ahead. The profit pool of the Indian banking industry is probable to augment from US\$ 4.8 billion in 2005 to US\$ 20 billion in 2010 and further estimated to US\$ 40 billion by 2015. This expansion, growth and pace are due to chunk of middle class population. It is estimated that, with growing number of private banks and their services, the domestic credit market of India is expected to grow from US\$ 0.4 trillion in 2004 to US\$ 23 trillion by 2050. Third largest banking hub of the globe by 2040 - is that vision too far away?

5. Review of Literature

A survey of literature revealed that in the field of Fundamental Analysis, large numbers of academicians and independent researchers have carried out extensive research, Dominic Crag, Jim Berg, John Colnan, Mohamed Azim, Ben McClure, Ehab Mohamed, Mark P Bauman, Cristina Abad, Sten, Thore, Joaquina Laffarga, Frank Shostak Kotrappa, and they produced important findings which became ultimate parameter in this arena. However most of the studies were carried out in advance countries like UK, USA, and Europe etc. The critical analysis of these studies highlights that no systematic and scientific study has yet been made to test the authenticity and validity of these important concepts in the context of the banking sector operating in developing nations and thus the present paper seeks to make a humble beginning in these respects.

John Colnan (1994), Senior Research Analyst from SHAN Stockbroking's Research Department, provides some brief pointers on what information to look for and how to make sense of what is available. Jim Berg (1999) examined that fundamental analysis looks at the fundamental issues that drive the value of the particular company. These issues include its financial position, its industry sector, and the current economic environment. The objective was to identify companies that may

be considered undervalued in the market with a view to investing when the time is right. In this study Jim, Berg outlined more about what fundamental analysis is and how it could be used. Mark P Bauman (1996) outlined the development of fundamental valuation model and reviewed related empirical work. First, an accounting-based expression for firm's equity value has been developed into a rich theoretical framework. The verified its descriptive validity regarding the mapping of accounting numbers in to stock prices. This paper identified three major issues associated with practical implementation of the model; the prediction of future profitability, the length of appropriate forecast horizon, and the determination of the appropriate discount rate. Jon Lynch (1998) reveals that in recent times, there has been a bigger push towards stock market research, which is being conducted by private individuals. This has been possible through the vast amount of information on the Australian stock market, now available on-line to any subscriber. This article explains the difference between the fundamental and technical analysis – the most common methods adopted to conduct research on the performance of stock markets. Vanstone B, Finnie G and Tan C (2004) examines financial trading from the aspect of security selection. In practice, it is unrealistic for a financial trader to participate in the full market of tradable securities competing for investment capital. Essentially, there are two main methodologies used, namely, fundamental analysis and technical analysis. This paper examines the practice of fundamental analysis and demonstrates how neural networks can be practically employed to enhance the fundamental selection process.

6. Introduction of Financial Analysis

This section of study embodies the calculation and analysis of selected variables, taken into reflection for the study purpose. The ratios are being calculated by the aid of raw data revealed by the researcher. The raw data encompasses Yearly Results and Balance Sheet of the sample companies. After calculation of ratios, analysis of individual ratio is being done. The statistical tool used for analysis is One-way Analysis of Variance (ANOVA). It is performed by using software known as SPSS.

The ratios being calculated for the purpose of analysis of financial performance are:

Earning Per Share (EPS), Operating Profit Margin (OPM), Net Profit Margin (NPM), Debt Equity Ratio (DER), Return on Equity (ROE), Price Earning Ratio (PER), Return on Assets (ROA)

The analysis and interpretation of study thereby is carried out on chronological order of the parameters mentioned above.

7. Results and Discussions

7.1 Earning per Share (EPS)

Earning per Share is the measure of company's ability to generate after tax profits per share held by the investors. This ratio is computed with the help of the following formula as expressed in rupee terms.

$$\frac{\text{Earning after taxes and preferred dividends}}{\text{Total number of equity shares outstanding}}$$

Table 2 : EPS (in rupees) Position of sample companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	59	31.75	17.43	26.25	24.85
2004-05	69.94	41.79	20.66	32.83	32.63
2005-06	81.79	44.72	6.97	22.98	27.06
2006-07	83.73	45.65	14.37	22.62	32.76
2007-08	86.29	48.84	23.01	28.08	34.65
Average	76.15	42.55	16.488	26.552	30.39

Source: Computed from the data available in annual reports of the bank concerned

The Earning per share position of the sample companies is summarized in Table 2, and discussed below.

As shown in Table 2, the EPS of SBI, PNB, BOI, BOB and CB showed mostly increasing trend during the study period. The EPS of SBI is substantially higher than that of PNB, BOI, BOB and CB at every year during the study period. On an average SBI generated EPS of Rs.76.15, highest among all, followed by PNB (42.55), CB (30.39), BOB (26.552) and then BOI (16.488), the lowest among the five sample companies. Thus analysis reveals that SBI was the most efficient bank in the terms of generating earning per share.

The EPS position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 3

Hypothesis Testing

Ho: EPS position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: EPS position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 3: One-way ANOVA for EPS

Source of Variation	SS	Df	MS	F-ratio	5% F-limit
Between Groups	10634.8	4	2658.69	53.581	F (4, 20)= 2.87
Within Groups	992.402	20	49.62		
Total	11627.2	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 53.581 which is greater than the table value of 2.87 (CV > TV at 5% significance level), the null hypothesis is rejected and the alternative hypothesis is accepted. Hence, it is concluded that the EPS position of SBI, PNB, BOI, BOB and CB differ significantly.

7.2 Operating Profit Margin (OPM)

Operating Profit Margin indicates how effective a company is at controlling the costs and expenses associated with their normal business operations. This ratio is found out using the following formulae and expressed in percentage terms.

$$\frac{\text{Operating Profit} * 100}{\text{Net Sales}}$$

The Operating Profit Margin position of the sample companies is depicted in Table 4, and discussed below.

Table 4: Operating Profit Margin (in %) of sample companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	66.38	57.37	57.51	64	63.56
2004-05	54.45	52.15	54.4	55.13	55.93
2005-06	55.15	55.35	51.39	46.8	54.9
2006-07	54.97	59.69	58.73	53.49	60.78
2007-08	63.96	61.96	62.19	64.12	66.5
Average	58.982	57.304	56.844	56.708	60.334

Source: Computed from the data available in annual reports of the companies concerned.

As it could be observed in Table 4, among all sample companies, CB sustained the highest operating profit margin during the study period followed by SBI which has registered a reasonably higher margin during the period under review. On an aggregate basis, CB was highly successful in controlling the expenses by registering an average OPM of 60.334%, followed by SBI, PNB, BOI and BOB which could make average OPM of 58.982%, 57.304%, 56.844 and 56.708%, respectively. Thus, it is found that CB is the most efficient company in controlling costs and expenses when compared to other sample companies.

The OPM position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 5.

Hypothesis Testing

Ho: OPM position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: OPM position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 5: One-way ANOVA for OPM

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	49.48	4	12.37	0.431	F (4, 20)= 2.87
Within Groups	573.562	20	28.678		
Total	623.041	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 0.431 which is less than the table value of 2.87. (CV < TV at 5% significance level), the null hypothesis is accepted and hence it is concluded that the operating profit margin position of SBI, PNB, BOI, BOB and CB does not differ significantly.

7.3 Net Profit Margin (NPM)

Net Profit Margin indicates how much a company is able to earn after all direct and indirect expenses to every rupee of revenue. This ratio is calculated by using the following formula and expressed in percentage terms.

$$\frac{\text{Net Profit} * 100}{\text{Net Sales}}$$

The Net Profit Margin position of the sample companies is depicted in Table 6, and discussed below.

Table 6: Net Profit Margin (%) of Sample Companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	10	11.25	14.35	12.67	15.3
2004-05	12.08	14.25	17.39	15.73	19.09
2005-06	13.27	16.66	5.63	10.52	14.65
2006-07	12.31	15.01	9.97	11.64	15.41
2007-08	11.49	13.34	12.23	11.14	12.5
Average	11.83	14.102	11.914	12.34	15.39

Source: Computed from the data available in annual reports of the companies concerned

The data in Table 6 reveals that it was Canara Bank which outperformed other banks in terms of net profit margin. However, the data also reveal there was stagnation in the NPM position of SBI. The highest NPM of Canara Bank was 19.09% in 2004, which of BOI, BOB, PNB and SBI were 17.39%, 15.73%, 14.25% and 12.08% respectively. On an aggregate basis, mean NPM of Canara Bank was 15.39%, the highest, followed by PNB (14.102), BOB (12.34%), BOI (11.914%) and SBI (11.83%), the lowest among the five sample companies. Thus, it was found that it was again CB to be the most efficient company in controlling indirect expenses when compared to SBI, PNB, BOI and BOB.

The NPM position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 7.

Hypothesis Testing

Ho: NPM position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: NPM position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 7: One-way ANOVA for NPM

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	49.22	4	12.305	1.75	F (4, 20)= 2.87
Within Groups	140.665	20	7.033		
Total	189.885	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 1.75 which is less than the table value of 2.87 ($CV < TV$ at 5% significance level), the null hypothesis is accepted and hence it is concluded that the NPM position of SBI, PNB, BOI, BOB and CB does not differ significantly.

7.4 Debt Equity Ratio (DER)

Debt Equity Ratio compares the creditors' funds with owners' funds. It indicates that how much amount of money is being placed by the creditors as that of equity holders. It represents the proportion of borrowed funds in the total capital of the company. This ratio is calculated by using the following formula and expressed in terms of times.

$$\frac{\text{Total Debt}}{\text{Net Worth}}$$

The Debt to Equity position of the sample companies is depicted in Table 8, and discussed below.

Table 8: Debt Equity Ratio of sample Companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	17.75	18.96	19.34	15.27	17.4
2003-05	16.41	17.8	18.83	14.39	16.58
2005-06	16.04	12.97	18.99	14.74	15.88
2006-07	14.86	13.47	20.02	12.55	16.38
2007-08	15.18	13.59	21.46	14.57	13.9
Average	16.048	15.358	19.728	14.304	16.028

Source: Computed from the data available in annual reports of the companies concerned

The data in Table 8 reveal that BOI achieved the highest Debt Equity Ratio in every year during the study period, followed by SBI. BOB alone registered the lowest ratio. Even the five year average Debt Equity Ratio of BOI was significantly higher (19.728 times) than that of SBI (16.048 times), CB (16.028 times), PNB (15.358 times) and BOB (14.304 times). Thus, it is inferred that BOB has the least proportion of debt fund in its total capital and hence is the most efficient bank among all other sample companies. BOB has highest portion of its self owned funds in the capital structure followed by BOB, PNB, CB and SBI.

The DER position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 9.

Hypothesis Testing

Ho: DER position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: DER position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 9: One-way ANOVA for DER

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	83.79	4	20.95	8.019	F (4, 20)= 2.87
Within Groups	52.249	20	2.612		
Total	136.048	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 8.019 which is greater than the table value of 2.87 (CV > TV at 5% significance level), the null hypothesis is rejected and the alternative hypothesis is accepted. Hence, it is concluded that the DER position of SBI, PNB, BOI, BOB and CB differ significantly.

7.5 Return on Equity (ROE)

Return on Equity is seen as a measure of how well a company used reinvested earnings to generate additional earnings. This is computed using the following formula and expressed in percentage terms.

$$\frac{\text{Earning after Taxes and Preferred Dividends} * 100}{\text{Net Worth}}$$

The Return on Equity position of the sample companies is depicted in Table 10, and discussed below.

Table 10: Return on Equity (%) of sample companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	18.05	20.88	24.03	17.62	24.56
2004-05	18.19	22.12	25.15	18.85	25.48
2005-06	18.1	17.28	7.62	12.02	18.16
2006-07	15.47	15.35	14.07	10.54	18.83
2007-08	14.24	14.76	19.05	11.87	13.72
Average	16.81	18.078	17.984	14.18	20.15

Source: Computed from the data available in annual reports of the companies concerned.

Among all the five banks, Canara Bank could make the highest ROE of 25.48% in 2004, followed by BOI (25.15%) in 2004 and PNB (22.12%) in 2004. The data in Table indicate that BOI registered significantly the lowest RoE of 7.62% in 2005. If we talk about aggregate figures, the CB has registered highest RoE of 20.15% followed by PNB (18.076%), BOI (17.984%), SBI (16.81%) and BOB (14.18%). Thus, Canara Bank was most efficient in generating additional earnings by using invested earnings than other four sample companies.

The ROE position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 11.

Hypothesis Testing

Ho: ROE position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: ROE position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 11: One-way ANOVA for ROE

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	95.358	4	23.839	1.134	F (4, 20)= 2.87
Within Groups	420.356	20	21.018		
Total	515.713	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 1.134 which is less than the table value of 2.87 (CV < TV at 5% significance level), the null hypothesis is accepted and hence it is concluded that the RoE position of SBI, PNB, BOI, BOB and CB does not differ significantly.

7.6 Price Earning (P/E) Ratio

Price Earning Ratio highlights the connection between the price and recent company's performance. This ratio moves either side only when price and profits get discounted. This ratio is calculated by using the following formula and expressed in terms of times.

$$\frac{\text{Share Price at a given time}}{\text{Earning Per Share}}$$

The Price Earnings position of the sample companies is depicted in Table 12, and discussed below.

Table 12: Price Earning Ratio of Sample Companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	4.32	3.21	2.17	3.28	2.86
2004-05	8.16	7.99	2.85	7.4	4.44
2005-06	7.58	8.78	14.75	9.48	7.39
2006-07	10.9	10.32	9.17	10.17	8.15
2007-08	10.85	9.66	7.29	7.66	5.62
Average	8.362	7.992	7.246	7.598	5.692

Source: Computed from the data available in annual reports of the companies concerned.

The data in Table 12 reveals that only SBI achieved the highest price earning ratio in every year during the study period, followed by PNB, BOB and BOI. CB alone registered the lowest ratio. Even the five year price earning ratio of SBI was significantly higher (8.362) than that of PNB (7.992), BOB (7.598), BOI (7.246), and CB (5.692). Thus, it is inferred that there was more responsiveness between the earning capacity and the share price in case of SBI than that of other banks, and it reveals that SBI did better in share market when compared to other four banks. There is also an increasing trend in the price earnings position of SBI.

The P/E Ratio position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 13.

Hypothesis Testing

Ho: PER position of SBI, PNB, BOI, BOB and CB do not differ significantly.

Ha: PER position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 13: One-way ANOVA for PER

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	21.268	4	5.317	0.497	F (4, 20)= 2.87
Within Groups	213.779	20	10.689		
Total	235.048	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 0.497 which is less than the table value of 2.87 (CV < TV at 5% significance level), the null hypothesis is accepted and hence it is concluded that the P/E ratio position of SBI, PNB, BOI, BOB and CB does not differ significantly.

7.7 Return on Assets (ROA)

Return on assets measures the overall efficiency of capital invested in business. It indicates what the yield is for every rupee invested in assets. This is computed using the following formula and expressed in percentage terms.

$$\frac{\text{Earning after Taxes and Preferred Dividends} * 100}{\text{Total Assets}}$$

The Return on Assets position of the sample companies is depicted in Table 14, and discussed below.

Table 14: Return on Assets (%) of sample companies

Year	SBI	PNB	BOI	BOB	CB
2003-04	0.83	0.98	1.11	1.01	1.24
2004-05	0.9	1.08	1.19	1.14	1.34
2005-06	0.94	1.12	0.36	0.71	1.00
2006-07	0.89	0.99	0.62	0.73	1.01
2007-08	0.8	0.95	0.79	0.72	0.86
Average	0.872	1.024	0.814	0.862	1.09

Source: Computed from the data available in annual reports of the companies concerned.

Among all the five banks CB could make the highest yield 1.34% in 2004 and 1.24% in 2003. The data in the table indicates that BOI registered the lowest RoA of 0.36% in the year 2005. The average ROA of CB and PNB were (1.09% and 1.024% respectively) almost same while that of SBI, BOB and BOI were a bit lower (0.872%, 0.862% and 0.814% respectively). Thus, CB and PNB were more efficient in generating yield over assets and hence there overall efficiency is better than other three sample companies.

The ROA position of sample companies are compared and tested using the following hypothesis. The details are shown in Table 15.

Hypothesis Testing

Ho: ROA position of SBI, PNB, BOI, BOB and CB does not differ significantly.

Ha: ROA position of SBI, PNB, BOI, BOB and CB differ significantly.

Table 15: One-way ANOVA for ROA

Source of Variation	SS	DF	MS	F-ratio	5% F-limit
Between Groups	0.279	4	6.981	1.704	F (4, 20)= 2.87
Within Groups	0.819	20	4.096		
Total	1.098	24			

Note: One-way ANOVA has been performed in SPSS

Inference: Since the calculated value of F is 1.704 which is less than the table value of 2.87 (CV < TV at 5% significance level), the null hypothesis is accepted and hence it is concluded that the RoA position of SBI, PNB, BOI, BOB and CB does not differ significantly.

8. Major Findings

- The study revealed; That EPS of SBI is substantially higher than that of PNB, BOI, BOB and CB at every year during the study period. On an average SBI generated EPS of Rs. 76.15, the analysis reveals that SBI was the most efficient bank in the terms of generating earnings.
- Canara Bank sustained the highest operating profit margin during the study period of 60.334%. Thus, it is found that CB is the most efficient company in controlling costs and expenses when compared to other sample companies.
- Canara Bank which outperformed other banks in terms of net profit margin with an aggregate of 15.39%. It is followed up by PNB, BOB, BOI and SBI.
- BOB has highest portion of its self owned funds in the capital structure followed by BOB, PNB, CB and SBI.
- CB has registered highest ROE of 20.15% and thus was most efficient in generating additional earnings by using invested earnings than other four banks.
- There was more responsiveness between the earning capacity and the share price in case of SBI as it has highest price earning ratio in every year during the study period.
- The average Return on Assets of CB and PNB were 1.09% and 1.024% respectively. Therefore, CB and PNB were more efficient in generating yield over assets and hence there overall efficiency is better than other three sample companies.

9. Conclusion

Philosophy of trade and commerce is a futuristic approach relying on present economic structure and require overall scientific analysis. Financial analysis is the key for successful

commercial activity. The fundamental analysis which, aims at developing an insight into the economic performance of the business, is of paramount from view point of investment decisions. Thus the present study has been conducted to examine the economic sustainability of the five major banks in Indian banking sector: SBI, PNB, BOI, BOB and CB. The out come of the study produced that SBI performed better in terms of Earning per Share and Price Earning Ratio than PNB, BOI, BOB and CB. Therefore, there was more responsiveness between the earning capacity and the share price in case of SBI though its profit margin ratios were not better in comparison to other four banks. On the other hand, Canara Bank fared better in terms of OPM, NPM, ROE and ROA. In study it was found that BOB has the highest portion of self-owned funds in its capital structure but in controlling costs and expenses it was least efficient in comparison to other banks. The study produced that in earning capacity BOI has registered lowest with highest debt proportion accompanying least yield over its assets. Further it is found that PNB is the most efficient bank in generating yield over an asset which reflects its overall efficiency is better than other competitor banks.

10. Recommendations

After performing profound analysis of major players of Indian banking industry following suggestions might be looked over:

- The investors with long term perspective of investment should invest their riches in the company that is registering high profit margins constantly. Canara Bank resolves this rationale of the investors.
- Investors with short term outlook for investment should prefer SBI as their investment intention because there is more responsiveness between the earning capacity and the share price in case of SBI despite the fact that its profit margin ratios were not better than that of other companies.
- The investors who are risk averse may invest their capital in Bank of Baroda as it has the highest portion of self-owned funds in its capital structure.
- BOI has registered lowest earning capacity, highest debt proportion and least yield over its assets, therefore immediate investment in the same should be evaded.
- The study also revealed that PNB is efficient in generating yield over assets which indicates that its overall efficiency is good. The investors with an objective of earning moderate returns might invest in PNB.

In general it is found that society has trust on public sector banks thus public sector banks have to explore the potential of the trust. They must launch good schemes which are tax saving flaxy schemes along with proper guidance to invest their ideal money. By developing confidence they can promote investment in their banks. Invested money can be utilized by banks to fund economic activities in nation as well as of other nations through legal protected channels. This will enable banks to become global and earn more revenues which will be further distributed among the investors.

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