

## A STUDY ON FUNDAMENTAL ANALYSIS OF INDIAN SOCIAL SECTOR BANKS”

Dr S.M.Tariq Zafar\*, Dr D.S. Chaubey\*\*, Dr S.R. Sharma\*\*\*

### ABSTRACT

*With rapid Industrialization investment decisions in all sectors, have been gaining paramount importance, warranting the investors to be continuously cautious of risk and return involved in the same. To cater the growing economic appetite India requires huge investment which is possible with sound saving and investor's attitude to absorb common market risk which requires a planned and meaningful appraisal of both internal and external factors affecting the returns and savings. Ever since Indian economy opened its doors to MNCs, the Indian banking sector has been witnessing bizarre changes in terms of new products and services and stiff competition as well. In competitive global environment survival of banks depends on its profitability and efficient management. The social profitability of the banks, the growth rate and the risk exposure has a direct impact on its market potential. In the light of these recent developments, a careful analysis of the profitability of Indian banking sector is inevitable. The present study attempts to analyze the profitability of five public sector banks in India: SBI, PNB, OBC, AB, and BOI. The variables taken for the study are Operating Profit Margin (OPM), Net Profit Margin (NPM), Earnings Per Share (EPS), Dividends Per Share (DPS), Dividend Payout Ratio (DPR), Price Earnings Ratio (PER), Return on Net Worth (RoNW), Current Ratio (CR), Debt Equity Ratio (DER), and Fixed Assets Turnover Ratio (FATR). The study brings out the comparative efficiency of the banks. This study brings out the competitiveness effectiveness of five major banks.*

*Key Words: - OPM, NPM, EPS, DPS, DPR, PER, RoNW, CR, DER, and FATR, PNB, SBI, OBC, AB, BOI, , IPO, RBI, SCBs, PSBs, NPAs, ATMs, NSE, CAGR,*

### OBJECTIVE OF THE STUDY

Objective of the study is to analyze the profitability of five public sector banks in India and to come up with the best and worst performing public sector bank. Further to investigate the risk involved in banking industry, to develop rational and scientific investment pattern based on various variables through scientific evaluation of past and expected future performance of the selected banks. For better future, banks have to analyze the profitability position which requires scientific knowledge of evaluating intrinsic value of a bank practical exposure and to get familiarity of scheming comparative efficiency of different banks.

### METHODOLOGY

The study is done with special reference to five renowned Indian social sector banks listed on the BSE BANKEX. For the purpose analytical and descriptive

research design has been adopted and selection of banks has been done randomly from the index through simple random sampling technique. Banks listed on BSE BANKEX have been taken as sample size for the study. The study is based on the secondary data and the data of the sample banks (for a period of five years from 2004-05 to 2008-09) have been collected from the annual reports and the balance sheet published by the banks, RBI annual reports, the websites of the bank and various other sites. The sample banks are State Bank of India (SBI), Bank of India (BOI), Punjab National Bank (PNB), Allahabad Bank( AB) and Oriental Bank of Commerce(OBC).

### TOOLS USED FOR ANALYSIS:

In this study, for interpreting the results, the statistical tool that has been used is one-way Analysis of Variance (ANOVA) and it has been calculated by

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\* Director, Roorkee College of Management & Computer Applications, Roorkee (Uttarakhand)

\*\* Professor, OIMT, Rishikesh, (Uttarakhand)

\*\*\* Director, MIT, Dehradun., (Uttarakhand).

using SPSS. The ANOVA test is used to determine the impact independent variables have on the dependent variable in a regression analysis.

**Ratio Analysis:** Ratios have been calculated for past five years for the purpose of analysis. Ratios being designed are named as: Operating Profit Margin (OPM), Earnings per Share (EPS), Dividends per Share (DPS), Dividend Payout Ratio (DPR), Price Earnings Ratio (P/E), Return on Net Worth (RONW), Current Ratio (CR), Debt Equity Ratio (DER), Fixed Assets Turnover Ratio (FATR).

**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:

**Ho:** The Operating Profit Margin position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Operating Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly

**Ho:** The Net Profit Margin position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Net Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The EPS position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The EPS position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The DPS position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The DPS position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Dividend Payout Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Dividend Payout Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Price Earnings Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Price Earnings Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Return on Net Worth position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Return on Net Worth position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Current Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Current Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Debt Equity Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Debt Equity Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Ho:** The Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

## **INTRODUCTION TO INDIAN BANKING INDUSTRY**

With growing economy India is enjoying special attention universal; by and by it has become darling of global economy. Since half century world has witness cataclysmic change in the sphere of commercial banking. To match the global economic pace and competition Indian banking system has establish protective and balance approach to fulfill the desired need with protective future. In due action Indian banking was generally evolved to meet the financial need of the industry but to flourish its economic strength globally it have been varying its origin and sizes. At the apex is the Reserve banks of India (RBI), the nations Central bank followed by State bank of India (SBI), major nationalize scheduled banks, other joint stock banks, co-operatives banks, Regional rural Banks. Thus, the Indian banking sector comprises the public sector commercial banks, private sector banks, co-operative banks and regional rural banks.

Indian commercial banking system is divided in

two fold, “scheduled and non scheduled banks”. Scheduled banks constitute of commercial banks and co-operative banks. At present India have more than 76003 operational branches of Scheduled banks which are operating under strict regulation of RBI. To develop the sound banking system India adopted phase wise nationalization and during the first phase of financial reforms in 1969, 14 major Indian banks were nationalized. This move of nationalization of banks led to a shift from Class banking to Mass banking and to serve un-banked areas of the country. Since then the growth of the banking industry in India has been a continuous process.

Nationalization of banks leads unprecedented expansion of banking operations in India and explored economic revolution with some visible and invisible draw backs. In global competitive economy it is noted that the social sector banks in India accounts more than 78 per cent of total banking industry assets and enjoy the status of banking industry godfather along with excessive Non Performing Assets (NPAs) inefficient manpower, lack of modern technology, political interference and corruption. On the other hand in global competition the Private Sector national and multinational Banks in India are witnessing immense progress. With effective utilization of modern technology (*Internet banking, mobile banking, phone banking, ATMs*) and efficient workforce in banking industry they are establishing them self as a competitive leader

## **CURRENT SCENARIO OF INDIAN BANKING INDUSTRY**

The present Indian banking structure is a result of prudent process of expansion, reorganization and consolidation. In initial banking stage economic considerations govern the growth of banks nationalization but with growing economy greater emphasis having being accorded on social objectives resulting into expansion of branches network penetrating deeply in all part of the nation. By meeting out this social objective Indian banking system emerged as one of the largest in the world today.

Presently with wider range in banking industry Indian social sector banks are fairly mature in term of supply, product range and urban reach. But rural penetration still remains a challenge especially to competitor private sector and foreign banks. Generally Indian mass have deep faith in social sector banks over private sector in terms of quality of assets and capital adequacy. To protect this faith Reserve Bank of India as an autonomous body is responsible to manage rupee volatility without any fixed exchange rate and is accountable to all financial decisions with minimal pressure from the government.

In present volatile global economic scenario India has managed protective economic and services sector growth which resulted demand for banking services especially retail banking, mortgages and investment services which will lead to M&As, takeovers, and asset sales in large. 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.

At Present 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. 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.

## **INDIAN BANKS FUTURE CHALLENGE IN GLOBAL COMPETITION**

With overall economic growth and efficient structural reforms Indian banks are emerging global competitors and are proving major source of financial sector revenue. With efficient social structural reforms the financial services penetration in India continues to

be healthy, but not to the desired pace. It is found that just 40% of the Indian population has bank accounts and many of these accounts are defunct. Banks have also opened 5.06 crore no-frills accounts which are more or less white elephant for banks. Out of six lakh habitations In India, only about 30,000 (5%) have commercial bank branches and less than three banks branches per 100 sq-km of land area which is far less in global bank branch comparison. Keeping economic objectivity to increase credit flow into economic activity, RBI target to establish bank branch into all habitations with 20000 populations by 2012, which is uphill task for banks. Further deposits mobilized in 2009 in rural bank branches were only 9% of total deposit and share of total credit of banks was 7 %. The percentage of mass having any kind of insurance cover is just 10 % and of non life insurance is just 0.6%. It is evident that generally banks have flaws in appraisal which become cause of NPAs like (*borrowers' viability, lenders viability, unique identity (UID) and coverage*).

It is found that every indicator of profitability, including return on assets, return on equity, and net interest margin and spread declined. Growing NPA which aggregate to 2.39% in FY10, declining profitability as (RoA) in FY10 came down to 1.05%, return of funds to 9.29%, spread by 0.10%, net profit to 8.3%, operating profit to 10.4%, failing Securitization / Reconstruction companies, going forward (liquidity management), repo rate which has emerged as policy rate, growing inflation, credit recovery, weakening overall credit due to central bank progressive withdrawal of liquidity support provided by them, relinquishing SCB share of credit to capital market, real estate and commodities are matter of great concern in coming future and will hamper the targeted 9 % economic growth of India.

Further providing credit in remote area not only for products and services, but also for improved quality of life, education is also matter of concern for overall balance economic and social growth. Thus, India compared poorly, not only with OECD countries, but with Asian peer group countries in financial inclusion. Annual RBI report has expressed concerns on

deteriorating assets quality, sluggish deposits growth and slow progress in financial inclusion in the banking sector. SBI and ICICI banks called for large banks with scale up their assets size at least more than five times and capital to meet the growing needs of the country, which is growing at a faster pace and is poised to attain double digit economic expansion. Future overview of global economic engagement, financial economist and academicians predict that emerging markets provided most of the world's economic growth over the past many years, with china and India accounting nearly 50% by themselves and thus fastest growing Asia will need \$400-\$450 billion in capital by 2015.

Keeping in view becoming stable economic leader in global competition banks have to control above mentioned future challenges in limit. If not then process of economic recovery in the short run will be difficult. For medium and long term banks have to become more efficient and transparent and vibrant to ensure more sustainable and inclusive economic growth

## **REVIEW OF LITERATURE**

Literature review is an approach of systematic study which require collection and analysis of literatures in the selected area in which the researcher has limited exposure. A survey of existing literature concluded that large numbers of academicians' professional research institutions and independent researchers have carried out extensive research in the field of Fundamental Analysis, *Mohamed Azim, Cristina Abad Sten, D.S. Chaubey, S.R.Sharma, Prakash Tiwari, Hemraj Verma, Thore Joaquina Laffarga, S.M.Tariq Zafar, Frank Shostak Kotrappa, Crag, Jim Berg, John Colnan, Mark P Bauman*, and produced effective and relevant findings which gave new dimensions to fundamental analysis. But most of the studies were carried out in advance countries like UK, USA, and Europe and very scant studies in India and developing nations emphasizing fundamental analysis of the banking sector. Further the outcome of these studies reflects that studies which are carried out in developing nations are not scientific and lack authenticity and

validity in the context of the banking sector and thus keeping developing nations in mind this paper initiate humble beginning in these respects.

*John Colnan (1994)* in his study provided some relevant indicators to analyze on what information to look for and how to make sense out of available information's. *Jim Berg (1999)* investigated the fundamental issues like financial status of the organization, its industry sector and the prevailing economic environment that drive the value of a particular company. He outlined more about fundamental analysis and how it could be used by the company at the time of investing when the time is right and also to identify companies that may be deemed undervalued in existing market. *Mark P Bauman (1996)* in his study "A Review of Fundamental Analysis Research in Accounting" revealed, three major issues linked with practical implementation of the model; analyzing future profitability, the duration of relevant forecast horizon, and the determination of the suitable discount rate according to prevailing conditions. *Jon Lynch (1998)* in his study, "Share Market Analysis-Fundamental Vs Technical Analysis", revealed, that with easy excess to the information private individuals are conducting more research on stock market and highlighted the similarity and differences between the two most common methods of conducting research on the performance of stock markets the fundamental and technical analysis. *Scott Whisenant and Patricia M. Fairfield (October 2000)* in their study "Using Fundamental Analysis to Assess Earnings Quality: Evidence from the Center for Financial Research and Analysis" highlighted post-event negative abnormal returns to the group of fundamental analysts. The study also produced statistical and significant deterioration in the financial performance of the identified firms in the year after the recommendations. *Vanstone B, Finnie G and Tan C (2004)* study entitled- "Enhancing Security Selection in the Australian Stock Market Using Fundamental Analysis and Neural Networks" revealed, importance of security selection for financial trading and examine the practice of fundamental

analysis and demonstrates how neural networks can be practically employed to enhance the fundamentalist selection process. *Jenni L. Bettman, Stephen Sault and Emma Welch (March 2006)* in their study entitled: "Fundamental and Technical Analysis: Substitutes or Compliments?" emphasized that the fundamental and technical analysis literatures invest considerable effort in assessing their respective ability to explain share prices, they invariably do so without reference to each other and concluded that the valuation of shares also have implications for other valuation exercises. *Necmi Avkiran and Hiroshi Morita (2008)* study entitled: "Predicting Bank Stock Performance with Fundamental Relative Analysis: Simultaneous Multi-Dimensional Benchmarking as an Investment Tool" reveals that fundamental analysis or financial ratio analysis fails to capture the benefits of a simultaneous multi-dimensional benchmarking relative to a company's peers. Main objective of this study was to predict bank stock performance one year ahead by a composite efficiency metric based on an approach, which is according to researchers is fundamental relative analysis. The study also makes a number of other useful methodological contributions for the purpose. *Yanfeng Xue and May Zhang (August 2008)* in their study entitled: "Fundamental Analysis, Institutional Investment, and Limits to Arbitrage" examines whether institutional investors trade on these fundamental signals and the implications of institutional investors' trading for stock valuation and proved that transient institutional investors trade on fundamental signals and also explain the abnormal returns associated with fundamental signals and contributes to our understanding of institutional investors' role in enhancing market efficiency. *Russell B. Gregory-Allen, Hany A. Shawky and Jeffrey Stangl (2009)* in their study entitled: "Quantitative vs. Fundamental Analysis in Institutional Money Management: Where's the Beef?" examined the controversy over who does a better job, Traditional Managers (Fundamentalists), or Quantitative Managers. Their empirical results indicate that when examining performance purely attributable

**Table 1: Operating Profit Margin (in %) of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	21.1340	14.8385	30.5262	13.6214	21.2113
2005	22.5019	21.4296	25.1489	21.5396	6.6690
2006	18.3557	17.3396	22.0101	15.6753	10.3589
2007	19.4154	17.7251	19.1190	15.8943	13.7197
2008	21.7414	22.6943	18.3460	17.0841	17.0289
Average	20.6296	18.8054	23.0300	16.7629	13.7976

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com

to the use of a distinct Primary Investment Process, only the Fundamental approach is shown to significantly add value. However, when examining marginal performance of a Secondary Process, over and above a Primary approach, no process adds value, and in fact some detract.

### **INTRODUCTION OF FINANCIAL ANALYSIS**

This section of paper embodies the calculation and scientific analysis of selected variables which are taken for the study purpose. For study the researcher has revealed raw data which encompasses yearly results and Balance Sheet of the sample companies and calculated the desired ratios and further analysis of individual ratio is being done. For analysis statistical tool One-way Analysis of Variance (ANOVA) is used through software known as SPSS.

The ratios being calculated for the purpose of analysis of financial performance are: Operating Profit Margin (OPM), Earnings per Share (EPS), Dividends per Share (DPS), Dividend Payout Ratio (DPR), Price Earnings Ratio (P/E), Return on Net Worth (RONW), Current Ratio (CR), Debt Equity Ratio (DER), Fixed Assets Turnover Ratio (FATR).

Further the analysis and interpretation of study carried out on chronological order according to the set parameters.

### **FUNDAMENTAL ANALYSIS AND INTERPRETATION**

#### **Operating Profit Margin**

Operating Profit Margin of a company reflect its efficient and effective ability in controlling the costs and expenses associated with their usual business operations. This ratio is calculated by using the following formula and expressed in percentage terms:

$$\frac{\text{Operating Profit}}{\text{Total Revenues}} \times 100$$

The Operating Profit Margin position of sample banks is depicted in Table 1 and discussed below.

As it could be observed in Table 1, among all sample banks, OBC registered a reasonably higher margin during the period under review. SBI, though being the largest bank in terms of operations and networking, could not beat OBC and PNB. On aggregate basis, OBC was highly successful in controlling the expenses by registering an average OPM of 23.03%, followed by PNB, SBI, AB and BOI, which could make average OPM of 20.63%, 18.81%, 16.76% and 13.79%, respectively.

The Operating Profit Margin position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 2.

**Table 2: One-way ANOVA for OPM**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	251.125	4	62.781	3.993	0.015
Within Groups	314.439	20	15.722		
Total	565.563	24			

Source: One-way ANOVA has been calculated by SPSS

**Table 3: Net Profit Margin (in %) of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	11.5280	9.9470	17.2436	13.4056	13.8008
2005	14.5184	11.8028	18.7429	15.4798	5.3077
2006	14.7001	11.6364	12.2908	17.3945	9.0462
2007	12.7234	10.3539	10.9732	14.6763	11.0016
2008	12.8645	11.8610	4.8301	13.7641	14.6310
Average	13.2669	11.1202	12.8161	14.9441	10.7575

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Ho:** The Operating Profit Margin position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Operating Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the Operating Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly.

### 3.2 Net Profit Margin

Net Profit Margin of a company indicates its ability to earn on the total sales after deducting all expenses to every rupee of revenue but before interest and taxation. This ratio can be found by using the following formula and expressed in percentage terms:

$$\frac{\text{Net Profit}}{\text{Total Revenues}} \times 100$$

The Net Profit Margin position of sample banks is summarized in Table 3 and discussed below.

The data in Table 3 reveal that there was stagnation in the NPM position of PNB whereas for OBC the ratio drastically reduced in 2008. On an aggregate basis, mean NPM of AB was 14.94%, the highest, followed by PNB (13.27%), OBC (12.81%), SBI (11.12%) and BOI (10.75%), the lowest among five sample banks.

The Net Profit Margin position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 4.

**Ho:** The Net Profit Margin position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Net Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the Net Profit Margin position of PNB, SBI, OBC, AB and BOI differs significantly.

**Table 4: One-way ANOVA for NPM**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	57.845	4	14.461	1.449	0.255
Within Groups	199.601	20	9.980		
Total	257.445	24			

Source: One-way ANOVA has been calculated by SPSS

**Table 5: EPS (in Rupees) Position of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	41.7895	69.9412	35.6325	13.3654	20.6877
2005	44.7226	81.7884	37.7100	15.6270	6.9768
2006	45.6484	83.7294	21.4464	15.8077	14.3914
2007	48.8444	86.2876	23.1823	16.7929	23.0440
2008	64.9774	106.5627	14.0983	21.8209	38.2615
Average	49.1965	85.6619	26.4139	16.6828	20.6723

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

### Earnings per Share

The Earnings per Share is one of the important measures of economic performance of any entity. It is one of the most important ratios which measures the net profit earned per share after tax. It reflects the strength and ability of a company to generate profits. . This ratio is computed with the help of the following formula and expressed in rupee terms.

$$\frac{\text{Earnings after Taxes and Preferred Dividends}}{\text{Total Number of Equity Shares Outstanding}}$$

The Earnings per Share position of the sample banks is summarized in Table 5 and discussed below.

As shown in the Table 5, the EPS of PNB and AB showed an increasing trend from year to year during the study period. The average EPS of SBI is greater than that of rest of the sample banks during the entire study period. However, EPS of SBI was substantially higher than that of PNB, OBC, BOI and AB in every year during the study period. On an average SBI generated EPS of Rs. 85.66 followed by PNB (Rs. 49.19), OBC (Rs. 26.41), BOI (Rs. 20.67), and AB

(Rs. 16.68). Thus, the analysis reveals that SBI was the most efficient bank in terms of generating earnings per share.

The EPS position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 6.

**Ho:** The EPS position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The EPS position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the EPS position of PNB, SBI, OBC, AB and BOI differs significantl

### Dividends per Share

Dividends per Share and Earnings per Share are similar and are used interchangeably; and it shows how much the shareholders were actually paid by way of dividends. The DPS can be found out by the following formula and expressed in rupee terms.



**Table 6: One-way ANOVA for EPS**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	16355.202	4	4088.80	40.47	2.556
Within Groups	2020.444	20	101.02		
Total	18375.646	24			

Source: One-way ANOVA has been calculated by SPSS

**Table 7: DPS (in Rupees) Position of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	3.9999	11.0000	5.0000	2.0000	1.1280
2005	5.5242	12.4999	2.9998	3.4326	2.2710
2006	5.9999	14.0000	4.4998	4.0000	3.4208
2007	12.9998	14.0000	4.6998	3.0000	4.0354
2008	12.9998	21.4999	4.6998	3.0000	4.6797
Average	8.3047	14.5999	4.3798	3.0865	3.1070

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Table 8: One-way ANOVA for DPS**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	481.674	4	120.418	15.632	5.993
Within Groups	154.070	20	7.704		
Total	635.744	24			

Source: One-way ANOVA has been calculated by SPSS

#### Dividends Paid

##### Total Number of Equity Shares Outstanding

The DPS position of sample banks is summarized in Table 7 and discussed below

The data in Table 7 reveal that DPS position of all banks except that of OBC and AB increased from year to year during the period under review. On an average, SBI paid out more dividends (Rs.14.59) than that of PNB, OBC, BOI and AB, which paid Rs.8.30, Rs.4.37, Rs.3.10 and Rs.3.08, respectively. Thus, it is concluded that it was SBI, which was more efficient in terms of dividends payment to the shareholders.

The DPS position of the sample banks is compared

and tested using the following hypotheses. The details are shown in Table 8.

**Ho:** The DPS position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The DPS position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the DPS position of PNB, SBI, OBC, AB and BOI differs significantly.

#### 3.5 Dividend Payout Ratio

The dividend payout ratio is the dividend per share

**Table 9: DPR (in %) Position of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	9.5716	15.7275	14.0320	14.9639	5.4526
2005	12.3521	15.2832	7.9551	21.9660	32.5510
2006	13.1437	16.7205	20.9819	25.3041	23.7696
2007	26.6148	16.2248	20.2734	17.8646	17.5120
2008	20.0067	20.1758	33.3361	13.7482	12.2310
Average	16.3378	16.8264	19.3157	18.7694	18.3032

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Table 10: One-way ANOVA for Dividend Payout Ratio**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	32.576	4	8.144	0.149	0.961
Within Groups	1092.325	20	54.616		
Total	1124.902	24			

Source: One-way ANOVA has been calculated by SPSS

divided by the earning per share. It measures the percentage of a company’s net income and the extent of the profit distributed to the shareholders as dividend. It is a cash flow measurement model and widely used by the investor to analyze the financial health of company and level of cash flows. This ratio is computed by the following formula expressed in percentage terms:

$$\frac{\text{Dividends per Share}}{\text{Earnings per Share}} \times 100$$

The Payout position of sample banks is summarized in Table 9 and discussed below.

The data in Table 9 reveal that there was a mixed trend in the distribution of payout ratio of sample banks during the study period. Contrary to the DPS position, on an average, OBC paid out 19.31% of its earnings as the dividends to the shareholders, whereas SBI paid out only 16.82%, which is quite low. AB, BOI and PNB paid out 18.76%, 18.31% and 16.33% of their earnings as the dividends, respectively. OBC was the most efficient in generating more cash inflows to the shareholders by paying the highest ratio of earnings as the dividends.

The Dividend Payout Ratio position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 8.

**Ho:** The Dividend Payout Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Dividend Payout Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is less than the tabulated value at 5% significance level, the null hypothesis is accepted and hence it is concluded that the DPS position of PNB, SBI, OBC, AB and BOI does not differ significantly.

### Price Earnings (P/E) Ratio

The Price Earnings ratio highlights the connection between the price and recent company’s performance. It measures the number of times the earnings per share discounts the market price of an equity share. It indicates the market price of an equity share to the earning per share and how much an investor is prepared to pay per rupee. This ratio moves either side only when price and profits get disconnected. This ratio is calculated using the following equation and

**Table 11: Price Earnings Ratio of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	7.9900	8.6601	8.4473	2.3605	2.8470
2005	8.7941	8.0323	8.2431	6.1687	14.8348
2006	10.3223	11.5616	10.9971	4.9944	9.1721
2007	9.6561	11.5068	8.0902	4.3292	7.2817
2008	7.8203	15.0038	12.5298	3.5126	6.6097
Average	8.9166	10.9529	9.6615	4.2731	8.1491

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Table 12: One-way ANOVA for Price Earnings Ratio**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	127.348	4	31.837	4.656	0.008
Within Groups	136.771	20	6.839		
Total	264.118	24			

Source: One-way ANOVA has been calculated by SPSS

expressed in terms of times:

$$\frac{\text{Share Price at a given time}}{\text{Earnings per Share}}$$

The Price Earnings position of sample companies is summarized in Table 11 and discussed below.

The data in Table 11 reveal that only SBI to achieved the high price earnings ratio in every year during the study period. On an average, price earnings ratio of SBI (10.9529 times) was higher than that of OBC (9.6615 times), PNB (8.9166 times), BOI (8.1491 times) and AB (4.2731 times). Thus, it is inferred that there was more responsiveness between the earnings capacity and the share price in case of SBI than that of rest of the sample banks, and it reveals that SBI did better in share market when compared to other banks.

The Price Earnings Ratio position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 12.

**H<sub>0</sub>:** The Price Earnings Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**H<sub>a</sub>:** The Price Earnings Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the DPS position of PNB, SBI, OBC, AB and BOI differs significantly.

### RETURN ON NET WORTH

This ratio signifies that profitability from the point of view of the equity shareholders will be judged after taking into account the amount of dividend payable to the preference shareholders. (Here all the banks do not have preference share capital in their sources of funds). Thus, this ratio can be computed on the following basis in percentage terms:

$$\frac{\text{Net Profit after Interest, Tax and Preference Dividend}}{\text{Equity Shareholders Funds}}$$

The Return on Net Worth position of sample companies is summarized in Table 13 and discussed below.

The data in Table 13 reveal that on aggregate basis,

**Table 13: Return on Net Worth of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	23.6355	18.1945	25.6302	29.8583	26.2902
2005	17.9660	17.8817	21.8234	23.2762	7.9095
2006	15.8619	15.9407	10.3914	19.4070	14.5330
2007	15.1857	14.5096	10.3710	16.7560	19.5473
2008	19.0005	13.7237	6.1154	18.5764	22.7660
Average	18.3299	16.0500	14.8663	21.5748	18.2092

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Table 14: One-way ANOVA for Return on Net Worth**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	131.830	4	32.958	1.003	0.429
Within Groups	657.412	20	32.871		
Total	789.242	24			

Source: One-way ANOVA has been calculated by SPSS

AB (21.5748) had the highest return on its net worth followed by PNB (18.3299), BOI (18.2092), and SBI (16.0500) and OBC (14.8663). Thus, from the above data it can be concluded that the borrowing policy of AB was economically wiser than rest of the sample banks and had the maximum rate of dividend declared.

The Return on Net Worth position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 14.

**Ho:** The Return on Net Worth position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Return on Net Worth position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the RONW position of PNB, SBI, OBC, AB and BOI differs significantly.

### 3.8 Current Ratio

The current ratio is an indicator of the firm’s commitment to meet its short-term liabilities. This ratio is an index of the concern’s financial stability since it

shows the extent of the working capital, which is the amount by which the current assets exceed the current liabilities. This ratio is expressed as follows:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The Current Ratio position of sample companies is summarized in Table 15 and discussed below

The data in Table 15 reveal that on the aggregate basis, current ratio for OBC (0.6791) was highest followed by AB (0.5841), SBI (0.4103), BOI (0.3866) and PNB (0.3477). An ideal current ratio is 2. The sample banks had current ratios which were very much below 2 and these poor current ratios were a dangerous signal to their respective managements. It can be inferred that the banks were trading beyond their resources, though OBC was comparatively better than rest of the sample banks.

The Current Ratio position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 16.

**Ho:** The Current Ratio position of PNB, SBI, OBC,

**Table 15: Current Ratio of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	0.4018	0.3240	0.3934	0.5698	0.4664
2005	0.2543	0.3709	1.1572	0.4976	0.4227
2006	0.3952	0.4029	0.9777	0.9742	0.4103
2007	0.3910	0.4212	0.5642	0.4811	0.3261
2008	0.2960	0.5328	0.3031	0.3980	0.3075
Average	0.3477	0.4103	0.6791	0.5841	0.3866

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

**Table 16: One-way ANOVA for Current Ratio**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	0.408	4	0.102	2.487	0.076
Within Groups	0.820	20	0.041		
Total	1.228	24			

Source: One-way ANOVA has been calculated by SPSS

**Table 17: Debt Equity Ratio of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	18.7424	15.7488	13.3269	20.2822	18.5128
2005	13.1442	15.2478	14.3823	17.5121	18.3337
2006	13.1899	13.7478	9.7079	13.3294	19.4616
2007	13.7906	13.9150	11.4272	13.3004	20.8639
2008	15.4375	10.9601	13.4795	13.6485	16.9960
Average	14.8609	13.9239	12.4648	15.6145	18.8336

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

AB and BOI does not differ significantly.

**Ha:** The Current Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the CR position of PNB, SBI, OBC, AB and BOI differs significantly.

### DEBT EQUITY RATIO

The debt-equity ratio is determined to ascertain the soundness of the long-term financial policies of the

company. The ratio indicates the extent to which the firm depends upon outsiders for its existence. It may be calculated as follows:

$$\frac{\text{Total Long – term Debt}}{\text{Total Long – term Funds}}$$

The Debt Equity Ratio of position of sample banks is summarized in Table 17 and discussed below.

The data in Table 17 reveal that on the aggregate basis, debt-equity ratio for BOI was highest (18.8336), followed by AB (15.6145), PNB (14.8609), and SBI (13.9239) and OBC (12.4648). It can be inferred that

**Table 18: One-way ANOVA for Debt Equity Ratio**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	112.907	4	28.227	5.738	0.003
Within Groups	98.384	20	4.919		
Total	211.292	24			

Source: One-way ANOVA has been calculated by SPSS

**Table 19: Fixed Assets Turnover Ratio of Sample Banks**

Year	PNB	SBI	OBC	AB	BOI
2004	4.7261	5.1645	7.1438	4.5049	3.9700
2005	4.5103	4.8464	5.0932	3.1736	3.8295
2006	4.5488	4.8209	4.8556	3.5778	4.1987
2007	5.1329	4.8984	5.7287	3.4536	5.2958
2008	3.8557	5.4459	7.0474	4.2356	3.5828
Average	4.5548	5.0352	5.9737	3.7891	4.1753

Source: Computed using MS-Excel Spread Sheets from the data available on money.rediff.com.

in BOI the proportion of long-term debt in total long-term funds was higher than that of rest of the sample banks.

The Debt Equity Ratio position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 18.

**H<sub>0</sub>:** The Debt Equity Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**H<sub>a</sub>:** The Debt Equity Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the DER position of PNB, SBI, OBC, AB and BOI differs significantly.

### Fixed Assets Turnover Ratio

This ratio indicates the extent to which the investments in fixed assets contribute towards sales. If compared with a previous period, it indicates whether the investment in fixed assets has been judicious or not.

This ratio is calculated using the following equation and expressed in terms of times:

$$\frac{\text{Net Sales}}{\text{Fixed Assets (net)}}$$

The Fixed Assets Turnover Ratio position of sample companies is summarized in Table 19 and discussed below.

The data in Table 19 reveal that only OBC to achieved the high fixed assets turnover ratio in every year during the study period. On an average, fixed assets turnover ratio of OBC (5.9737 times) was higher than that of SBI (5.0352 times), PNB (4.5548 times), BOI (4.1753 times) and AB (3.7891 times). Thus, it is inferred that in case of OBC, the investment in fixed assets brought about commensurate gain than that of rest of the sample banks.

The Fixed Assets Turnover Ratio position of the sample banks is compared and tested using the following hypotheses. The details are shown in Table 20.

**Table 20: One-way ANOVA for Fixed Assets Turnover Ratio**

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	5% Significance Limit
Between Groups	14.304	4	3.576	8.160	0.000
Within Groups	8.764	20	0.438		
Total	23.067	24			

Source: One-way ANOVA has been calculated by SPSS

**Ho:** The Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI does not differ significantly.

**Ha:** The Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI differs significantly.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI differs significantly

#### FINDINGS & CONCLUSION

- It is found that Oriental Bank of Commerce (OBC) is the most efficient Bank in controlling costs and expenses and sustained the highest operating profit margin during the study period of (23.0300) in comparison to four sample banks and lies on the top position. An average OPM of OBC is 23.03% followed by PNB, SBI, AB and BOI, which could make average OPM of 20.63%, 18.81%, 16.76% and 13.79%, respectively.
- On an aggregate basis five year average, mean NPM of Allahabad Bank (AB) was 14.94%, the highest and lies on the top position, followed by PNB (13.27%), OBC (12.81%), SBI (11.12%) and BOI (10.75%), the lowest among five sample banks.
- The study revealed; on an average the five year average Earnings per Share of State Bank of India is substantially higher (85.6619) than the four sample banks and lies on the top position, followed by PNB (Rs. 49.19), OBC (Rs. 26.41), BOI (Rs. 20.67), and AB (Rs. 16.68). The

*comparative study further reveals that SBI was the most efficient bank in terms of generating earnings per share.*

- The five year average Dividends per Share of State Bank of India is substantially higher (14.5999) than the four sample banks and lies on the top position, followed by PNB, OBC, BOI and AB, which paid Rs.8.30, Rs.4.37, Rs.3.10 and Rs.3.08, respectively. Thus, it is concluded that it was SBI, which was more efficient in terms of dividends payment to the shareholders.

**Inference:** Since the calculated value of F is more than the tabulated value at 5% significance level, the null hypothesis is rejected and hence it is concluded that the Fixed Assets Turnover Ratio position of PNB, SBI, OBC, AB and BOI differs significantly

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- It is found that Oriental Bank of Commerce (OBC) is the most efficient Bank in controlling costs and expenses and sustained the highest operating profit margin during the study period of (23.0300) in comparison to four sample banks and lies on the top position. An average OPM of OBC is 23.03% followed by PNB, SBI, AB and BOI, which could make average OPM of 20.63%, 18.81%, 16.76% and 13.79%, respectively.
- On an aggregate basis five year average, mean NPM of Allahabad Bank (AB) was 14.94%, the highest and lies on the top position, followed by PNB (13.27%), OBC (12.81%), SBI (11.12%) and BOI (10.75%), the lowest among five sample banks.

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- *The five year average Dividends per Share of State Bank of India is substantially higher (14.5999) than the four sample banks and lies on the top position, followed by PNB, OBC, BOI and AB, which paid Rs.8.30, Rs.4.37, Rs.3.10 and Rs.3.08, respectively. Thus, it is concluded that it was SBI, which was more efficient in terms of dividends payment to the shareholders.*
- *The five year average Dividend Payout Ratio of Oriental Bank of Commerce is higher (19.3157) than the four sample banks and lies on the top position. It has paid out 19.31% of its earnings as the dividends to the shareholders, whereas SBI paid out only 16.82%, which is quite low. AB, BOI and PNB paid out 18.76%, 18.31% and 16.33% of their earnings as the dividends, respectively. OBC proved as the most efficient in generating more cash inflows to the shareholders by paying the highest ratio of earnings as the dividends.*
- *On an average, price earnings ratio of SBI (10.9529 times) was higher than that of OBC (9.6615 times), PNB (8.9166 times), BOI (8.1491 times) and AB (4.2731 times). Thus, it is inferred that there was more responsiveness between the earnings capacity and the share price in case of SBI than that of rest of the sample banks, and that SBI did better in share market when compared to other banks and lies on the top position.*
- *On aggregate basis five year average Return on Net Worth of Allahabad Bank is (21.5748) which are the highest and lies on the top position among sample banks followed by PNB (18.3299), BOI (18.2092), SBI (16.0500) and OBC (14.8663). Thus, it can be concluded that the borrowing policy of AB was economically wiser than rest of the sample banks and had the maximum rate of dividend declared.*
- *On the aggregate basis five year average Current Ratio of Oriental Bank of Commerce is highest (0.6791) than the four sample banks and lies on the top position, followed by AB (0.5841), SBI (0.4103), and BOI (0.3866) and PNB (0.3477). In general perception an ideal current ratio is 2. The study revealed that the sample banks had current ratios which were very much below to 2 and these poor current ratios of the banks reflect the uncertain future to their respective managements. It can be inferred that the banks were trading beyond their resources, though OBC was comparatively better than rest of the sample banks.*
- *On the aggregate basis five year average Debt Equity Ratio of Bank of India is highest (18.8336) among the four samples banks and tops the list, followed by AB (15.6145), PNB (14.8609), SBI (13.9239) and OBC (12.4648). Thus, it can be inferred that in BOI the proportion of long-term debt in total long-term funds was higher than that of rest of the sample banks.*
- *On an average five year Fixed Assets Turnover Ratio of Oriental Bank of Commerce is (5.9737) which is highest among the four samples banks that of SBI (5.0352 times), PNB (4.5548 times), BOI (4.1753 times) and AB (3.7891 times) and tops the list. Thus, it is inferred that in case of OBC, the investment in fixed assets brought about commensurate gain than that of rest of the sample banks.*

## **RECOMMENDATION**

Due to the speculation in share market and the collapse of banking system, the economic position of



most of the countries across the world is worse at present. Though most of the economists of other countries said that the current economic scenario of India is far better than the other countries, it has been facing lot of difficulties such as high price of crude oil, rising trend of high interest rates, rupee appreciation, volatile share market and cut down of corporate earnings, high inflation etc, which impacted its core business of borrowing and lending to a great extent, in addition the banks also drives income from other sources, such as case management business which is also facing the heat of global recessions. How ever banks lost income from the source since most banks transformed their systems to CBS. Besides, rising bonds yields have resulted into a lower other income from the banks for the past four stepped up operations and plans to derive higher income from third party product sales from insurance companies, guarantees, letter of credit etc. Further, banks NIMs net interest rate came under pressure due to hiking of interest rate by banking regulators RBI which curbed the banks profit. How ever, the banks renewed focus on increasing its share of CASA base might help it in reducing the hike in the overall costs of borrowing thereby driving its margins. It is noticed that from recent past and prevailing present the banks assets quality seems to have deteriorated marginally in September (NPA) Very few banks are able to maintain NPA below 1%. Increasing Inflation, a hidden tax has to be absorbed by banks with efficient financial policies as it will impact low investment to prevailing opportunities as India is highly reliant upon foreign investment thus investors would be well placed to invest in inflation-hedging assets to protect their investment and return against the risk of a downturn in equities. But still when it compared to the other countries, India's banking system is strong. The main reason behind it is all the Indian public banks are under the supervision of RBI and following its regulations.

Thus, I would say that the investor should consider following points in current economic scenario:

- Have a minimum of a three-year investing horizon

- Imagine the future and then make it happen by buy systematically & strategically in small quantities
- Book your losses on stocks & sectors performing poorly
- Don't fall into the value trap-a cheap stock is not always a good buy
- Fundamental analysis have to be considered for better return
- Have to be vigilant about the performance of respective investment, its return and risk variables, inflation movement interest rate.
- Objectivity of investing must be supported by judicious expectations rather than basic objective of profit maximization with different time constraints. Because expectations play an important role in economic decisions making.
- Do not get derived by any particular market events as market mobilization are a result of overall economic growth and flouting information which need scientific analysis before any investment. *Slow and steady wins the race.*
- Investor must start by looking at sales and profit growth. If sales are sluggish then minutely analysis is needed. Similarly if profit margins under pressure then reasons for low profit should be examined by comparing the results of the first six months of the current year, with the six months of previous year. Raw material cost, interest rate movement.
- Examine hoe different companies in desired sector operate and how they cope with the different factors affecting the industry.
- If promoters have pledged shares with quarterly result then investor have to have to find the reason of promoters issuing pledged shares.

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