

## **Investment in Banking Stocks in BSE: A Performance Analysis**

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### **Abstract**

This research is basically a study revolving around investment in equities at stock market. Every investor wants good return on their investment and for high return, stock market is the best for the investors. There is no doubt that the stock market offer more return on investments as compared to the normal conventional practices, but a hasty decision can spoil it all. Stock market gives high return as well as full of high risk. Stock market is volatile in nature and so, it is nearly impossible for an investor to become perfect all the time. But many a times, the investors suffer a loss due to lack of proper knowledge and information and sometimes due to lack of expertise. But the frequency and intensity of losses can be reduced if they are little careful and do proper analysis of all influencing factors. This study encompasses a fundamental analysis of ten banking stocks through seven different parameters comparing the performances during last five years to finally arrive at the conclusion as to which one will be the optimum choice for investment.

Keywords: Return on equity %, Market capitalisation, Capital Adequacy Ratio, Net NPA, Beta

### **Declaration**

This paper is an original work and have neither been accepted nor published anywhere else.

### **Introduction**

#### **The Bombay Stock Exchange**

Bombay Stock Exchange (BSE) was established in 1875 being the first stock exchange of Asia. For the past 141 years, BSE has acted as a catalyst for the growth of the Indian corporate sector by facilitating an efficient capital-raising platform. More than 5500 companies are listed on BSE which makes it world's No. 1 exchange in terms of listed members. The market capitalisation of the companies listed on BSE is more than Rupees 100 Trillion as of 2017. The S&P BSE SENSEX is India's most widely tracked stock market benchmark index and regarded as the barometer of the movements of the share prices in the Indian stock market. This benchmark index is a free-float market capitalisation methodology based index consisting of 30 well-established and financially sound companies listed on Bombay Stock Exchange. These companies are from varied sectors like Power, Oil and Gas, Capital Goods, Metal, Metal Products and Mining, Finance, Transport Equipments, FMCG, Information Technology, Telecom, Healthcare, etc. The exchange is operated through "BSE on Line Trading System" or BOLT which is a unique computer system. It is also an ISO 9001:2000 certified organisation in the areas of surveillance and clearing /settlement functions.

#### **The Banking Industry**

Banking sector is an integral part of the financial system of a modern Industrial economy. The economic development process is closely related to the soundness of its banking system. Modern trade and e-commerce world almost be impossible without the availability of suitable banking services. Their borrowing, lending and related activities facilitate the process of production, distribution, exchange and consumption of wealth. Modern banks are very useful for the mobilisation of the resources of the country. In this way they become very effective partners in the process of economic development.

The Indian banking sector has undergone tremendous changes since the nationalisation of major commercial banks. The phase of liberalisation in 1990s brought the much desired openness which in turn allowed the sector to expand and flourish. It is now highly competitive and open. It has helped to increase the customer service to a great extent. Competition has also contributed a lot in developing the IT enabled banking infrastructure. Disinvestment of public sector banks has also made them more accountable to the market. The role of banking is now redefined from a mere financial intermediary to service provider of various financial services under one roof acting like a financial supermarket.

The modern days banking is greatly impacted by the advancement of information technology. The old banking system is history now. The more and more usage of internet banking is providing with paperless, hassle free and speedy banking services. Plastic money through the path of credit and debit cards is contributing substantially to reduce the use of cash. ATMs are providing cash at any place at any time. Customers today are not having the requirement to visit the bank premises for majority of the banking transactions. The new age facilities like tele-banking and mobile banking have made the banking services more modernised.

With the potential to become the fifth largest banking industry in the world by 2020 and third largest by 2025 according to KPMG-CII report, India's banking and financial sector is expanding rapidly. The Indian Banking industry is currently worth Rs. 81 trillion (US \$ 1.31 trillion). At present, there are twenty public sector banks, one other public sector bank, twenty six private banks, forty three foreign banks, thirty one state co-operative banks and fifty six regional rural banks. The competitive co-existence has compelled the players to remain focused towards serviceability, technology upgradation, sound and strategic risk management system, development of new products and extension of various new services and also to respond to the social cause by promoting financial inclusion. It is one of the most happening sectors and undoubtedly a pillar of Indian economy.

A total number of thirty nine bank stocks are listed in BSE which includes all twenty public sector banks (Allahabad Bank, Andhra Bank, Bank of India, Bank of Baroda, Bank of Maharashtra, Canara Bank, Central Bank of India, Corporation Bank, Dena Bank, Indian Bank, Indian Overseas Bank, Oriental Bank of Commerce, Punjab & Sind Bank, Punjab National Bank, Syndicate Bank, UCO Bank, Union Bank of India, United Bank of India, Vijaya Bank), one other public sector bank (IDBI Bank) and eighteen private and foreign banks (Axis Bank, City Union Bank, DCB Bank, Dhanlaxmi Bank, Federal Bank, HDFC Bank, ICICI Bank, IDFC Bank, IndusInd Bank, Jammu and Kashmir Bank, Karnataka Bank, Karur Vysya Bank, Kotak Mahindra Bank, Lakshmi Vilas Bank, RBL Bank, South Indian Bank, Standard Chartered PLC, Yes bank). Majority of those are priced with a very good valuation indicating the rosy position of the banking stocks as a whole. The ten stocks S&P BSE BANKEX is also almost at its life time high level.

It is, therefore, a great scope before the investors to target the banking stocks as the industry is in a great run and there are number of options in front of them.

### **Review of Literature**

Review of literature focuses on the earlier studies on financial performance. These studies are helpful in assessing the limitations, findings and suggestions involved in such studies.

**Vashisht (2004)** <sup>10</sup> discusses the recent global developments which causes transformation of the environment in which commercial banks operate. He points out that economic interdependence and interaction of countries have been greatly expanded due to the globalisation. The financial performance of the commercial banks is changed a lot in this globalised environment and they face new challenges as well as new opportunities.

**Kumar (2006)** <sup>1</sup> describes bank nationalisation in India as a paradigm shift in the focus of banking as it was intended to shift the focus from class banking to mass banking. The banks need to redesign their business strategies to incorporate specific plans to promote financial

inclusion of the poor and disadvantaged treating it both a business opportunity as well as a corporate social responsibility. Financial inclusion can emerge as commercial profitable business.

**Nair (2006)** <sup>5</sup> has focused on the future challenges of technology in banking. He considers that IT has a bright future in rural banking, but it is neglected because the rural segment is traditionally perceived as non viable. A successful bank needs to respond to the new market paradigm. They have to apply innovative steps for extending the banking services towards the untapped vast segment at the bottom of the pyramid.

**Madhavankutty (2007)** <sup>3</sup> concludes the banking system in India is matured enough to address prudential management practices comprehensively. Banking in India is at the verge of another reform by allowing foreign players. Further improvement in technology management, human resource management and the ability to foresee rapid changes in the financial landscape and to adopt quickly is the order of this time. Banks need to take sound risk management strategies and internal capital adequacy assessment to ensure the prudential requirements to be addressed.

**Shroff (2007)** <sup>6</sup> summarises how Indian banking system has been evolved over the year. The paper discusses some concerning issues. The author focuses comparable banking system for other countries. Indian banking system is bringing structural changes through the application of technology and innovation of products.

**Subbaroo (2007)** <sup>8</sup> highlights the transformation of the Indian banking system from domestic banking to international banking. He identifies certain specific requirements which include new technologies, well regulated risk and credit appraisal, treasury management, product diversification, internal control, external regulations and professional and skilled human resources to meet the global challenges.

**Uppal & Kaur (2007)** <sup>9</sup> agree that in the post banking sector reforms era, the efficiency of all the bank groups has increased but new private sector banks and foreign banks are benefited the most. They also suggest some efficiency improvement measures for the Indian nationalised banks. They also point out that that new private sector banks are competing with foreign banks continuously to improve their performance.

**Laxman, Deene & Badiger (2008)** <sup>2</sup> state that banking industry is undergoing a sea change in terms of its scope, content, structure, functions and governance. They observe the changes in their characters, compositions, contour and chemistry. The operational environment of the banks is radically changed due to the revolution in the information and communication technology front.

**Singla (2008)** <sup>7</sup> examines the crucial role played by financial management in the growth of banking. The study is based on the profitability position of sixteen banks. It reveals that the position is improved in comparison to the past. The banks are found to be in a better position due to the strong capital position and sound balance sheet.

**Mittal and Dhade (2011)** <sup>4</sup> conduct a comparative study on productivity and profitability by evaluating the performances of Indian Banks based on a five years period. They opine that the improved profitability is the key parameter from the view point of the shareholder. They consider that the bank management has to keep a balance between the social and commercial banking in order to keep a balance between the roles as the government's agent as well as a cutthroat competitor to improve their market holdings. They find that the public sector banks are less profitable than the public sector and foreign banks in terms of overall profitability. They observe that foreign banks are the best in terms of the net profitability and non-interest income of private sector banks is higher as compared to public sector banks because private sector banks are offering more and more fees based services to their different customer categories. Public sector banks need to introduce more services to the customer to stay competitive with private and foreign banks.

By considering the banking sector based on the above background, a genuine scope is visualised to identify the most preferred stock(s) in this sector which can optimise the investors' returns.

### Objectives

The study will try to achieve the following aims:

- To study the banking sector with reference to its historic trends during last five years.
- To undertake a comparative analysis involving major stocks of banking sector based on the performance of the company and risk & return on investment factors to identify the optimum choice of stocks from the view point of an equity investor.

### Methodology

- Keeping in view the objectives, the entire study is based upon fundamental Analysis.
- Economic & Industry Analysis of the last five years starting from Financial Year 2011-12 to 2015-16 has been undertaken.
- Ten stocks have been identified from the Indian banking sector for the study.
- Seven factors have been identified for the company Analysis as the basis of comparison.
- All the stocks are ranked separately based on each factor and these ranking have been considered as ranking scores. All such seven scores are added and then averaged for each company which ultimately has been considered as the final basis of comparison.

### Sources of Data

Entire information is collected through secondary sources. Some of the sources of secondary data are:

- Information collected from various sites on internet.
- Articles from e-library and magazines.

### Selection of companies and the parameters for evaluation

To undertake the study ten banking stocks listed in Bombay Stock Exchange (BSE) have been considered. It includes four private banks (Axis Bank, HDFC Bank, ICICI Bank, Kotak Mahindra Bank), five nationalised banks and one other public sector bank (IDBI Bank) to provide a fair view to the study. Except, Bank of India, Canara Bank and IDBI Bank, rest seven are constituents of S&P BSE BANKEX. The selected banks are as follows:

- |                   |                        |                         |
|-------------------|------------------------|-------------------------|
| 1) Axis Bank      | 5) HDFC Bank           | 9) Punjab National Bank |
| 2) Bank of Baroda | 6) ICICI Bank          | 10) State Bank of India |
| 3) Bank of India  | 7) IDBI Bank           |                         |
| 4) Canara Bank    | 8) Kotak Mahindra Bank |                         |

In order to have a complete performance evaluation, the following leading seven factors have been identified:

- |                                   |  |
|-----------------------------------|--|
| <b>F-1.</b> Return on equity (%)  | <b>F-5.</b> Capital Adequacy Ratio (%)   |
| <b>F-2.</b> Return on Assets (%)  | <b>F-6.</b> Net Non Performing Asset (%) |
| <b>F-3.</b> Market capitalisation | <b>F-7.</b> Beta                         |
| <b>F-4.</b> Dividend per share    |  |

F-1 to F-5 are measures of positive attributes while F-6 & F-7 are negative factors.

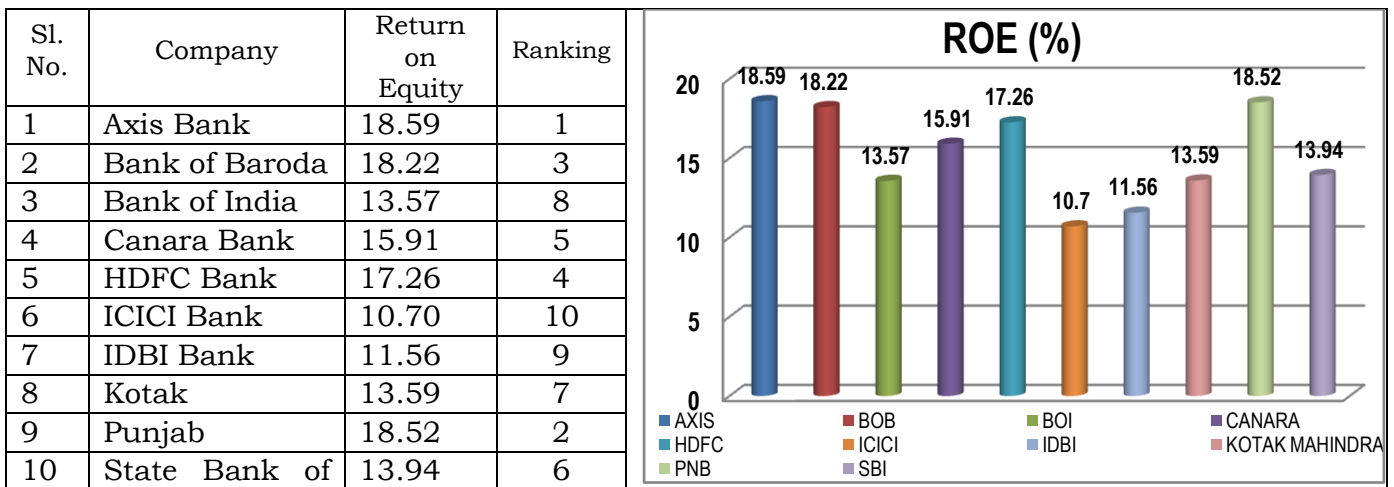
**Findings**

Followings are the analysis to see how these ten bank stocks have performed during last five years on the above mentioned seven parameters of return and risk.

**Factor 1: Return on Equity (%) (F-1)**

The return on equity or ROE measures the return to the shareholders investments in the company. It indicates the effectiveness of the management in equity financing, fund operations and generating growth of the company. Investors want to see how efficiently a company use their money to generate net income. Investors always look for a high return on equity because this indicates that the company is using its investors' funds effectively. A higher ROE is better.

**Figures and Ranking for Return on Equity (%) (F-1)**

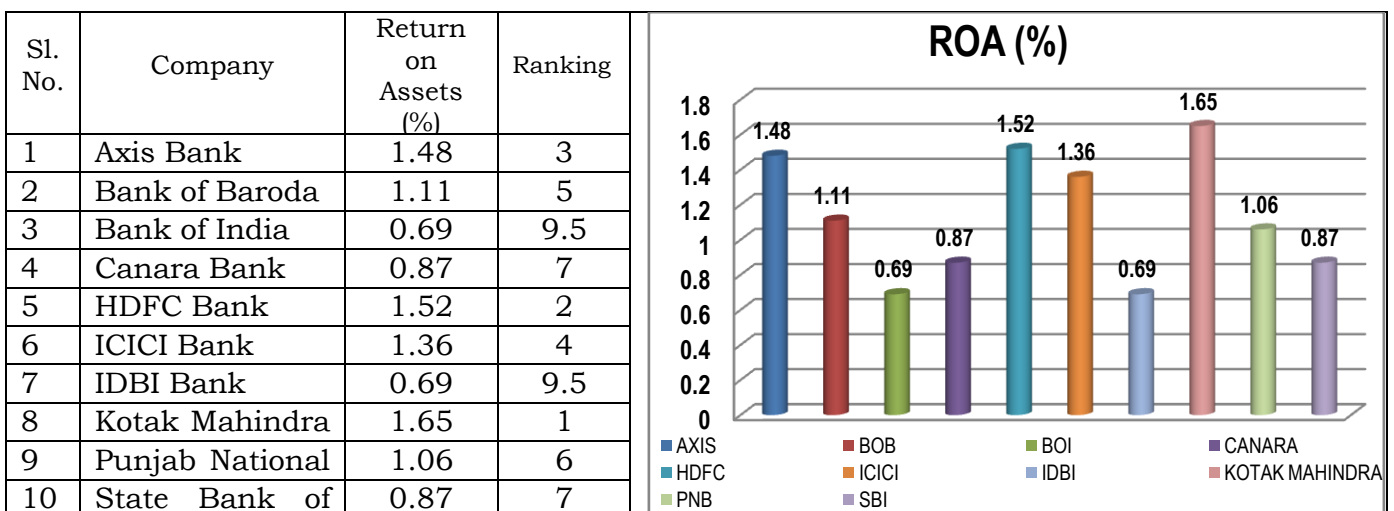


From the above figure, it is observed that three companies names as AXIS, PNB and BOB having ROE 18.59%, 18.52% and 18.22% respectively, others having ROE below 18%.

**Factor 2: Return on Assets (%) (F-2)**

The return on assets or ROA measures how efficiently a company has managed its assets to produce profits during a period. Return on assets = Net Income / Total Assets. A higher ratio is more favorable to investors because it shows that the company is more effectively managing its assets to produce greater amounts of net income.

**Figures and Ranking for Return on Assets (%) (F-2)**

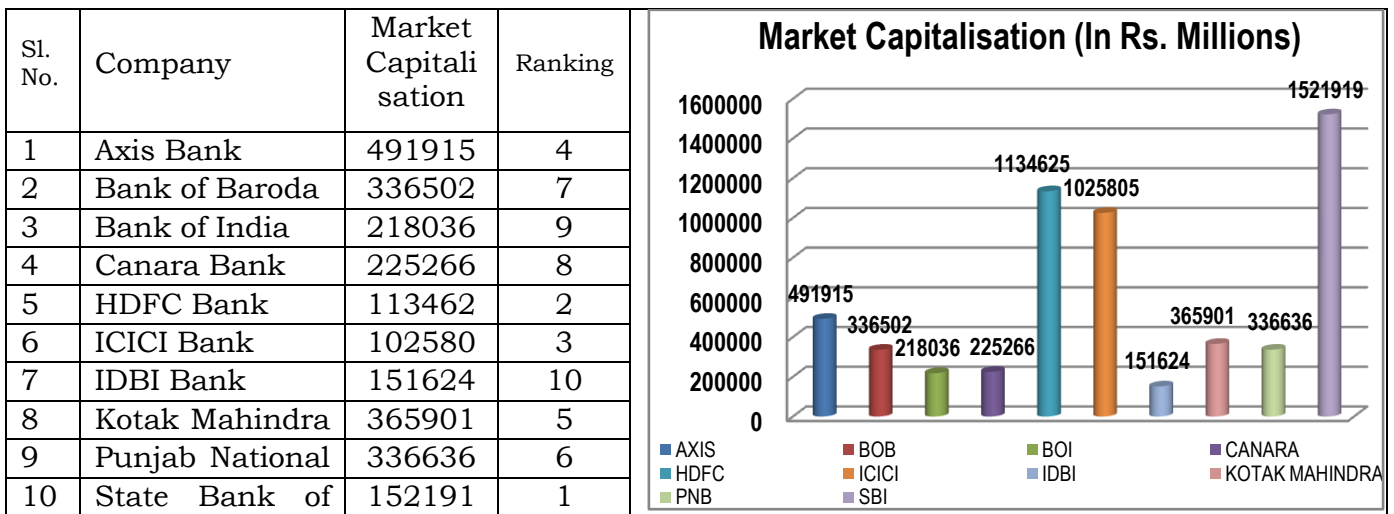


From the above figure, it is seen that Kotak Mahindra gave best result i.e. 1.65% followed by HDFC, AXIS, ICICI and BOB generating 1.52%, 1.48%, 1.36% and 1.11% respectively. Others have lower ROA than these five. Bank of India and IDBI bank both are tied with 0.69 at the ninth place. As per the ranking methodology applied, both are assigned with 9.5 rank (ranking score).

**Factor 3: Market Capitalisation (F-3)**

Market capitalisation (market cap) is the total market value of company's outstanding shares. Market capitalisation means the total number of outstanding shares of the company multiplied by the market price of that stock. The investors’ community uses this figure to determine a company's size.

**Figures and Ranking for Market Capitalisation (Rs. In Millions) (F-3)**

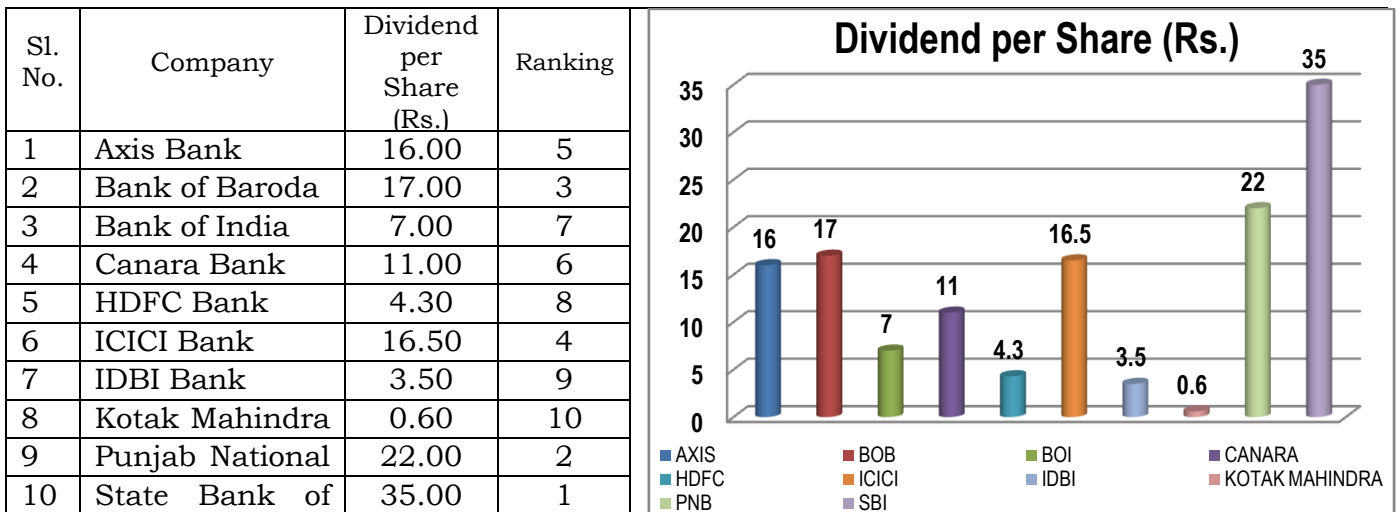


From the above figure clearly depicts the large cap companies are limited to SBI, HDFC and ICICI. The nearest is AXIS is half a size of the third one in the rank. Except those three, the rest all others are either mid cap or small cap.

**Factor 4: Dividend per Share (Rs.) (F-4)**

Dividend per share (DPS) is the amount of declared dividend issued by a company for every ordinary share outstanding. Dividend per share (DPS) is the total dividend paid out by a business, including interim dividends, divided by the number of ordinary shares outstanding. Investors generally use dividends as a signal. If it drops, investors may consider that as a negative signal of the performance of the company.

**Figures and Ranking for Dividend per Share (Rs.) (F-4)**

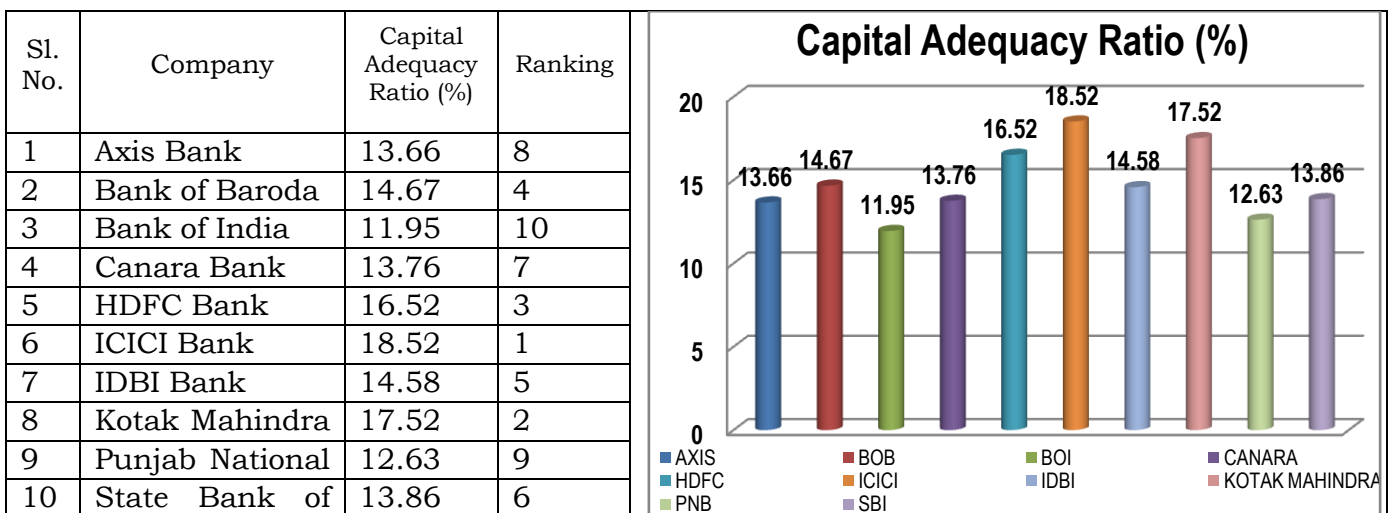


From the above figure, it is clear that SBI and PNB gave much higher DPS to their shareholders in comparison to other eight companies. The DPS of Kotak Mahindra is the lowest at a paltry 0.60 where the immediate next is IDBI bank with 3.50.

**Factor 5: Capital Adequacy Ratio (%) (F-5)**

It measures a bank's financial strength by using its capital and assets. Generally, a bank with a high capital adequacy ratio is considered safe and likely to meet its financial obligations. It is used to protect depositors and to promote the stability and efficiency of financial system around the world.

**Figures and Ranking for Capital Adequacy Ratio (%) (F-5)**

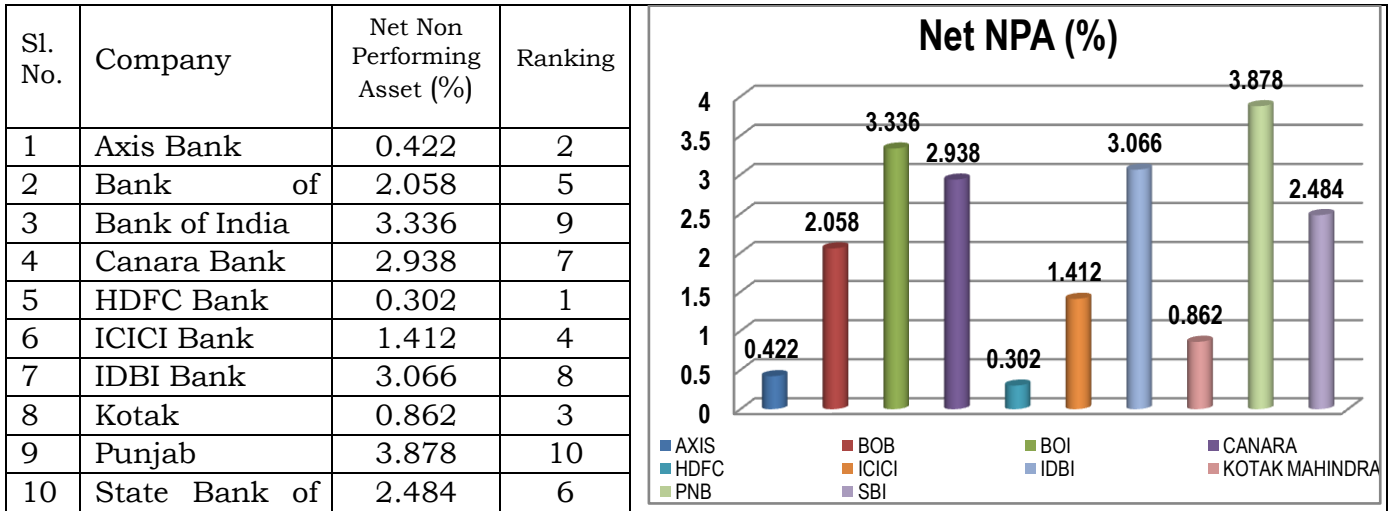


From the above figure, it is observed that ICICI, Kotak Mahindra, HDFC have the CAR more than 15 while BOB and IDBI are having almost nearer to it. The lowest CAR being 11.95 of Bank of India signifies that banks are having good financial strength and these are quite safe and able to meet financial obligations.

**Factor 6: Net Non Performing Asset (%) (F-6)**

The net NPA to loans (advances) ratio is used as a measure of the overall quality of the bank's loan book. An NPA are those assets for which interest is overdue for more than 90 days (or 3 months).

**Figures and Ranking for Net Non Performing Asset (%) (F-6)**



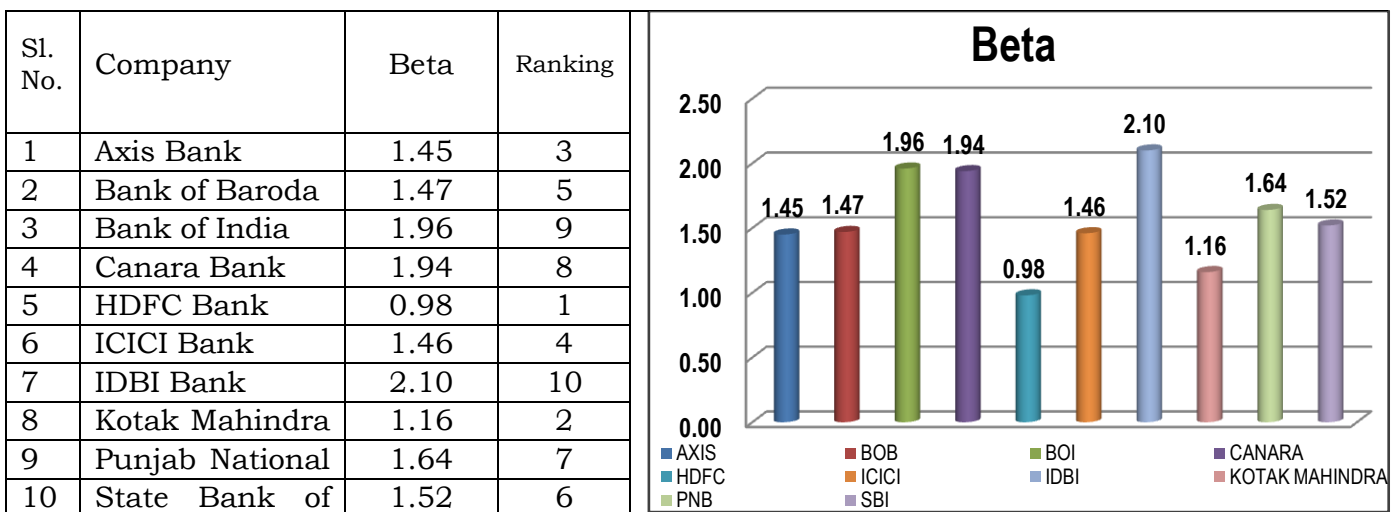
Net NPAs are calculated by reducing cumulative balance of provisions outstanding at a period end from gross NPAs. Higher ratio reflects rising bad quality of loans and so, ascending order is considered for ranking.  $NPA\ ratio = \frac{Net\ non-performing\ assets}{Loans\ given}$ .

HDFC and AXIS bank have net NPA ratio less than 1% which shows the good quality of loan's book. PNB and BOI have highest net NPA ratio more than 3%.

**Factor 7: Beta coefficient (F-7)**

Beta measures the degree of volatility in the movement of the price of a share in connection with the movement of the market portfolio. An investor may track the comparative variability of a particular share by this measure. A high beta value indicates a comparatively higher risk and vice versa. The ascending order has been considered for the ranking purpose.

**Figures and Ranking for Beta (F-7)**





From the above figure, it is seen that all companies have a beta coefficient more than 1 except HDFC which having Beta coefficient less than 1.

**Consolidated impact**

The next stage of analysis is to find out the consolidated impact of all these seven factors together. Following table shows the calculations:

**Consolidated Ranking (Company wise)**

NO	NAME	RANKING SCORE (1-10)							TRS	ARS	FINAL RANK
		F-1	F-2	F-3	F-4	F5	F-6	F-7			
1	Axis Bank	1	3	4	5	8	2	3	26	3.71	2
2	Bank of Baroda	3	5	7	3	4	5	5	32	4.57	5
3	Bank of India	8	9.5	9	7	10	9	9	61.5	8.79	10
4	Canara Bank	5	7	8	6	7	7	8	48	6.86	8
5	HDFC Bank	4	2	2	8	3	1	1	21	3.00	1
6	ICICI Bank	10	4	3	4	1	4	4	30	4.29	3
7	IDBI Bank	9	9.5	10	9	5	8	10	60.5	8.64	9
8	Kotak Mahindra Bank	7	1	5	10	2	3	2	30	4.29	3
9	Punjab National Bank	2	6	6	2	9	10	7	42	6.00	7
10	State Bank of India	6	7	1	1	6	6	6	33	4.71	6

- Return on equity (%) (F-1)
- Return on Assets (%) (F-2)
- Market capitalisation (F-3)
- Capital Adequacy Ratio (%) (F-4)
- Dividend per share (F-5)
- Net Non Performing Asset (%) (F-6)
- Beta(F-7)

All the ten stocks are already ranked based on each factor independently. The ranking positions are considered as ranking score of the company in that factor. Hence, it is obvious that a lower score is a better position. If there is tie rank, the average is considered as the score of each of the companies. All the companies, thus have seven ranking scores (F-1 to F-7) which are summed and Total Ranking Score (TRS) is worked out. TRS is then divided by seven (a total of seven factors are considered) to get the Average Ranking Score (ARS).

$$TRS = \Sigma F-1 \dots F-7 \text{ and } ARS = TRS \div 7$$

The degree of choice of a stock for investment consideration is ultimately based on the Final Rank which is derived by taking the ARS in ascending order.

The final ARS wise rank is as follows:

**Consolidated Ranking (Final Rank wise)**

NO	NAME	RANKING SCORE (1-10)							TRS	ARS	FINAL RANK
		F-1	F-2	F-3	F-4	F5	F-6	F-7			
1	HDFC Bank	4	2	2	8	3	1	1	21	3.00	1
2	Axis Bank	1	3	4	5	8	2	3	26	3.71	2
3	ICICI Bank	10	4	3	4	1	4	4	30	4.29	3
4	Kotak Mahindra Bank	7	1	5	10	2	3	2	30	4.29	3
5	Bank of Baroda	3	5	7	3	4	5	5	32	4.57	5
6	State Bank of India	6	7	1	1	6	6	6	33	4.71	6
7	Punjab National Bank	2	6	6	2	9	10	7	42	6.00	7
8	Canara Bank	5	7	8	6	7	7	8	48	6.86	8
9	IDBI Bank	9	9.5	10	9	5	8	10	60.5	8.64	9
10	Bank of India	8	9.5	9	7	10	9	9	61.5	8.79	10

From the above table we can observe that the best ASR recorded is 3.00 for HDFC while the logical min value possible is 1. It shows the high level of consistency in all performing parameters. The poorest score is recorded in case of BOI with 8.71 score while the logical max value possible is 10.

**Conclusion**

The Performance analysis of bank stocks is a very relevant topic on account of the increased investors’ interest in banking industry. There is always a need to study and analyse the fluctuations in the share price before investing in to the share market. Investor can arrive at rational decisions and avoid unnecessary losses if they make a performance analysis of the stocks.

The research was conducted on ten best possible bank stocks of BSE considering seven different parameters influencing the performance of the stock for last five years.

As per the study, the stock performance of HDFC bank outranks all other banks with an ARS of 3. It is followed by AXIS bank with an ARS of 3.71. The third rank is jointly occupied by ICICI and Kotak Mahindra bank with an ARS of 4.29.

The findings show that the banks with good ARS are performing constantly throughout the last five years. This study not only helps to predict how the return will be, but also guides a prospective investor in making good investment decisions. It indicates that investors should invest in the stock of banks, those having a better ARS for earning good returns.

Another important observation is that only one nationalised bank is placed among top five. All the four private banks occupy the top four positions. All four are excellent in the parameters of ROA, NPA and Beta. It indicates they are employing their assets most meaningfully and their loans and advances are issued through a much better mechanism. Last but not the least, their share prices are less volatile than the nationalised banks during the study period.

Every research has its own limitations. This study is also limited to time, selected number of companies and certain specific parameters. It is still expected to fulfill the basic objectives of the study to a large extent.

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