

Financial Soundness of Public Sector Banks in India: A Bankometer Analysis

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Abstract – India's financial system became the desire of the world due to it's unharmed nature after the global financial crisis of 2008 and the situation is not so good for the banks, as non-performing assets are increasing day by day, a stress is there on the profitability and so many banking frauds have taken place. All these elements have changed the complete scenario of banking in India. So, the present study is conducted to evaluate the financial soundness of Public Sector Banks in India. It is found in the results that all the selected Public Sector Banks are financially sound as their efficiency score exceeds the limit provided by the International Monetary Fund for the financial soundness of the banks. The most financially sound bank is the Indian Bank which is the top performer among the group for the entire study period. The solvency position of the State Bank of India has been found good as it is in the top two most solvent banks for four years out of total five years of the study.

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INTRODUCTION

As per the information of Reserve Bank of India, the Indian Banking Sector is properly capitalized and well-regulated. The financial and economic conditions in the country are far superior to any other country in the world. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well. Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry. The digital payments system in India has evolved the most among 25 countries with India's Immediate Payment Service being the only system at level 5 in the Faster Payments Innovation Index. (India Brand Equity Foundation, 2018). Still the situation is not so good for the banks, as non-performing assets are increasing day by day, a stress is there on the profitability and so many banking frauds have taken place. All these elements have changed the complete scenario of banking in India. So, the present study is conducted to evaluate the financial soundness of Public Sector Banks in India.

REVIEW OF LITERATURE

Banerjee and Velamuri (2015) examined the operational efficiency of banks in India using a sample of data on public sector, private sector and foreign banks taking study period from the year 2000 to 2013. In findings, there was a negative association between the profitability and soundness measures and smaller

old private banks were found to be the strongest with dedicated client base. Foreign banks were found maintaining the high capital adequacy ratio and relatively higher return on assets. **Mittal and Mittal (2017)** analyzed the financial soundness of selected 13 private and 23 public sector banks in India for the period of 2007-2016 using Bankometer Model. According to the results of the study, all private and public sector banks are financially sound. ICICI bank and State bank of India were the most financially strong banks. The capital to assets ratio of ICICI bank and State bank of India was found to be highest and Kotak Mahindra bank and Indian bank had highest equity assets ratio. **Rahman (2017)** examined the financial soundness of 24 private commercial banks operating in Bangladesh using Bankometer model and it was revealed that all the banks have ensured sound financial status individually and banking industry has always been in favorable position during the period (2010-2015). **Abirami (2018)** analyzed the soundness of selected public and private sector banks in India for a period of ten years (2005-06 to 2014-15). The study was based on secondary data and Bankometer test. It was found that all the selected public sector banks in the study are found to be super sound and the top performers in respect of S-Score computed with the help of Bankometer in private and public sector banks are Kotak Mahindra Bank and IDBI Bank Ltd. respectively.

OBJECTIVES OF THE STUDY

The following are the main objectives of the present study:

1. To evaluate the financial soundness of the Public Sector Banks.
2. To rank the banks according to their performance.

RESEARCH METHODOLOGY

The present study is analytical in nature. The Public Sector Banks in India are selected for the evaluation of financial soundness in the study. The period of study is from 2012-13 to 2016-17. The present study is based on secondary data which have been collected from the database provided by the Reserve Bank of India. The collected data have been compiled into tables and then analyzed with the help of Bankometer Model. The main feature of this model is that it requires very less number of parameters and the results of this test are accurate at a higher level as compared to other tests. Under this model, the solvency score is computed. The following procedure is used to compute the solvency score:

Parameters of Bankometer:

The following are the main parameter used in the Bankometer Model:

Capital to Assets Ratio $\geq 4\%$

Equity to Assets Ratio $\geq 2\%$

Capital Adequacy Ratio $40\% \leq \text{CAR} \leq 8\%$

Non-performing Loans to Loans Ratio $\leq 15\%$

Cost to Income Ratio $\leq 40\%$

Loans to Assets Ratio $\leq 65\%$

The above percentage expresses a bank that:

- has Capital to Assets Ratio more than 4%
- has Equity to Assets Ratio more than 2%
- has Capital Adequacy Ratio between 8% to 40%
- has restricted the Non-performing Loans to Loans Ratio up to 15%
- has restricted the Cost to Income Ratio below 40%

- has maintained Loans to Assets Ratio below 65%.

Bankometer Equation:

The following equation is used to evaluate the solvency of banks under Bankometer Model:

$$S = 1.5 \cdot \text{CA} + 1.2 \cdot \text{EA} + 3.5 \cdot \text{CAR} + 0.6 \cdot \text{NPL} + 0.3 \cdot \text{CI} + 0.4 \cdot \text{LA}$$

Where:

S= Solvency Score

CA= Capital to Assets Ratio

EA= Equity to Assets Ratio

CAR= Capital Adequacy Ratio

NPL= Non- Performing Loans to Loans Ratio

CI= Cost to Income Ratio

LA= Loans to Assets Ratio

Criteria for evaluating the results

The banks with solvency score which is greater than 70 are solvent and termed as "Super Sound Banks". On the other hand, banks having the value of solvency score less than 50 are termed as "Insolvent" and the banks having solvency score between 50 and 70 are in moderate position and those banks are classified into "Gray Zone". (Shar, Shah and Jamali, 2010).

RESULTS AND DISCUSSION

The data have been analyzed with the Bankometer Model and solvency score have been computed and analyzed as following:

TABLE 1 BANKOMETER FINAL RESULTS FOR THE YEAR 2012-13

Name of the Bank	Capital Adequacy Ratio	Capital to Assets	Equity to Assets	NPA to Loan	Cost to Income	Loans to Assets	Solvency Score	Rank
ALLAHABAD BANK	11.03	0.24	10.86	3.19	15.64	63.36	83.96	19
ANDHRA BANK	11.76	0.38	11.16	2.45	14.60	67.24	87.87	14
BANK OF BARODA	13.30	0.08	11.61	1.28	15.32	59.98	89.95	8
BANK OF INDIA	11.02	0.13	10.44	2.06	14.94	63.93	82.59	24
BANK OF MAHARASHTRA	12.59	1.07	9.87	0.52	17.07	64.53	88.76	12
CANARA BANK	12.40	0.11	11.96	2.18	13.81	58.73	86.86	17
CENTRAL BANK OF INDIA	11.49	0.99	10.43	2.90	17.99	64.12	87.01	16
CORPORATION BANK	12.33	0.08	9.81	1.19	11.79	61.37	83.84	20
DENA BANK	11.03	0.31	9.85	1.39	13.60	57.99	79.00	26
IDBI BANK LIMITED	13.13	0.41	12.75	1.58	11.08	60.82	90.47	5
INDIAN BANK	13.08	0.51	14.20	2.26	18.12	64.88	96.33	1
INDIAN OVERSEAS BANK	11.85	0.38	10.62	2.50	15.05	65.55	87.02	15
ORIENTAL BANK OF COMMERCE	12.04	0.15	12.59	2.27	13.77	64.25	88.65	13
PUNJAB AND SIND BANK	12.91	0.56	10.88	2.16	14.18	63.91	90.20	6
PUNJAB NATIONAL BANK	12.72	0.07	13.57	2.35	17.71	64.47	93.43	3
STATE BANK OF BIKANER AND JAIPUR	12.16	0.08	11.00	2.27	19.20	66.89	89.75	9
STATE BANK OF HYDERABAD	12.36	0.02	11.20	1.61	15.88	66.03	88.81	11
STATE BANK OF INDIA	12.92	0.04	12.58	2.10	21.58	66.76	94.82	2
STATE BANK OF MYSORE	11.79	0.07	12.82	2.69	16.84	66.83	90.15	7
STATE BANK OF PATIALA	11.12	0.27	9.57	1.62	16.16	67.99	83.83	21
STATE BANK OF TRAVANCORE	11.70	0.05	8.55	1.46	15.40	66.43	83.35	23
SYNDICATE BANK	12.59	0.28	9.52	0.76	17.38	68.60	89.02	10
UCO BANK	14.15	1.30	8.45	3.17	12.29	64.58	93.03	4
UNION BANK OF INDIA	11.45	0.23	10.86	1.61	16.30	66.67	85.97	18
UNITED BANK OF INDIA	11.66	1.02	9.24	2.87	14.58	60.12	83.58	22
VJAYA BANK	11.32	1.53	8.49	1.30	14.11	62.86	82.26	25

Source: Compiled from Statistical Tables Relating to Banks in India: RBI

The above Table 1 is related with the computation of solvency score for the Public Sector Banks to evaluate the solvency of banks for the year 2012-13 and the table also shows the data required for computing solvency score. As per the figures of the table, UCO Bank followed by Bank of Baroda is found to be the best in terms of Capital Adequacy Ratio and there is a little difference between the two bottom performers. The name of bottom performer in case of Capital Adequacy Ratio is the Bank of India followed by Allahabad Bank. When the Capital to Assets Ratio is analyzed, it is found that the Vijaya Bank followed by UCO Bank is the top performer and the bottom performer is the State Bank of Hyderabad followed by State Bank of India. The results of this ratio show that the Assets of Vijaya Bank are financed highly by the long term source of finance in comparison to the other Public Sector Banks. Equity to Assets Ratio has been found highest in case of Indian Bank which is a good solvency indicator as the more use of equity reduces the control of outsiders in the entity. The second top performer in case of this ratio is the Punjab National Bank. The bottom performance position is acquired by UCO Bank followed by Vijaya Bank in case of Equity to Assets Ratio. When the Non-Performing Assets to Net Advances Ratio is considered, it has been found that Bank of Maharashtra followed by Syndicate Bank and Corporation Bank is at top rank. Allahabad Bank followed by UCO Bank and Central Bank has been found at bottom rank of performance in terms of Non-Performing Assets to Net Advances ratio. The Cost to Income Ratio is best in case of IDBI Bank Ltd. followed by Corporation Bank as the ratio is the minimum in case of IDBI Bank which is the good indicator of high income in comparison to expenses. The lower performance position in terms of Cost to Income Ratio is acquired by State Bank of India followed by the State Bank of Bikaner and Jaipur. The Loans to Assets Ratio of Syndicate Banks has been found at top level and the bottom performer in this case is the Dena Bank.

As per the results computed with the help of Bankometer Model, it is found that all Public Sector Banks are in the range of 80% to 100% of solvency score and the banks under this range are considered as super sound banks in terms of long term financial position. The Indian Bank holds the top solvency position among the group of selected Public Sector Banks. This top performance is followed by State Bank of India. The bank having the lowest solvency score is the Dena Bank which is followed by the Vijaya Bank. Even these banks are bottom performers but they are financially sound as per the solvency scores.

TABLE 2 BANKOMETER FINAL RESULTS FOR THE YEAR 2013-14

Name of the Banks	Capital Adequacy Ratio	Capital to Assets	Equity to Assets	NPA to Loan	Cost to Income	Loans to Assets	Solvency Score	Rank
ALLAHABAD BANK	9.96	0.25	10.46	4.15	16.53	62.61	80.27	23
ANDHRA BANK	10.78	0.35	10.09	3.11	14.78	64.33	82.40	17
BANK OF BARODA	12.28	0.07	10.85	1.52	16.44	60.20	86.02	8
BANK OF INDIA	9.97	0.11	10.33	2.00	15.87	64.68	79.29	24
BANK OF MAHARASHTRA	10.79	1.05	9.76	2.03	18.65	65.23	83.96	13
CANARA BANK	10.63	0.09	11.95	1.98	13.99	61.20	81.55	19
CENTRAL BANK OF INDIA	9.87	1.03	9.88	3.75	19.65	61.25	80.59	22
CORPORATION BANK	11.65	0.08	9.01	2.32	12.20	61.74	81.44	21
DENA BANK	11.14	0.43	11.01	2.35	15.12	62.11	83.64	14
IDBI BANK LIMITED	11.68	0.49	13.88	2.48	11.22	60.09	87.16	7
INDIAN BANK	12.64	0.25	14.57	2.26	17.04	65.27	94.67	2
INDIAN OVERSEAS BANK	10.78	0.45	11.32	3.20	15.08	63.98	84.02	12
ORIENTAL BANK OF COMMERCE	11.01	0.14	12.06	2.82	13.91	63.13	84.33	11
PUNJAB AND SIND BANK	11.04	0.50	10.10	3.35	14.85	60.56	82.21	18
PUNJAB NATIONAL BANK	11.52	0.07	12.98	2.85	19.54	63.46	88.94	5
STATE BANK OF BIKANER AND JAIPUR	11.55	0.08	11.71	2.76	22.17	70.61	91.15	3
STATE BANK OF HYDERABAD	12.00	0.01	11.82	3.12	15.69	67.61	89.82	4
STATE BANK OF INDIA	12.44	0.04	13.15	2.57	23.06	67.48	94.84	1
STATE BANK OF MYSORE	11.08	0.06	12.23	3.29	19.35	66.89	88.09	6
STATE BANK OF PATIALA	10.38	0.32	10.42	3.17	18.31	66.54	83.33	15
STATE BANK OF TRAVANCORE	10.79	0.05	8.64	2.78	17.67	65.92	81.54	20
SYNDICATE BANK	11.41	0.25	9.16	1.56	16.55	69.05	84.82	10
UCO BANK	12.68	0.42	8.97	2.38	12.48	62.55	85.97	9
UNION BANK OF INDIA	10.80	0.21	10.23	2.33	17.04	64.76	82.81	16
UNITED BANK OF INDIA	9.81	1.08	7.36	7.18	14.47	52.57	74.47	26
VIJAYA BANK	10.56	0.63	7.95	1.55	14.80	59.34	76.54	25

Source: Compiled from Statistical Tables Relating to Banks in India: RBI

The above Table 2 shows the solvency position of selected Public Sector Banks evaluated with the help of Bankometer Analysis for the year 2013-14. As per the data of the table in terms of Capital Adequacy Ratio, UCO Bank followed by Indian Bank has been found securing top position which shows the strong capital position for the banks. The bottom position in case of Capital Adequacy Ratio has been acquired by United Bank of India followed by Central Bank of India. The Capital to Assets Ratio is highest for United Bank of India followed by Bank of Maharashtra. The higher level of this ratio shows the higher level of financial soundness. The value of this ratio is lowest in case of State Bank of Hyderabad followed by State Bank of India. The financial position of Indian Bank followed by IDBI Bank Ltd. is found to be superior among the group of Public Sector Banks on the basis of Equity to Assets Ratio as the value of ratio is highest in case of Indian Bank. The bottom position has been obtained by United Bank of India followed by Vijaya Bank in case of Equity to Assets Ratio. In case of Non-Performing Assets to Net Advance Ratio, Bank of Baroda followed by Vijaya Bank and Syndicate Bank is at the top performance position. It can be said that the solvency level of Bank of Baroda, Vijaya Bank and Syndicate Bank is very high for the year 2013-14 in terms of ensuring the repayment of loans sanctioned by them. The bottom performer in regard to this ratio is United Bank of India followed by Allahabad Bank and Central Bank of India. It means that the banks are not able to recollect the loans given by them to the public and shows the low level of managerial efficiency of banks. The Cost to Income Ratio of State Bank of India has been found as the highest among the group, it is against the solvency of the banks as the bank is earning lower income as compared to its expenses among the group of banks. The Loans to Assets Ratio of State Bank of Bikaner and Jaipur has been found as best in comparison to the other Public Sector Banks and the

lowest ratio has been found for United Bank of India which shows the lower level of financial position.

All the banks have solvency scores exceeding the prescribed limit of 70 percent according to the solvency scores computed with the help of Bankometer Model for the year 2013-14. It means that all the selected banks are financially sound in term of solvency. The most solvent bank among the group of Public Sector Banks is the State Bank of India for the financial year 2013-14 and this top position is followed by Indian Bank. The bank having the lower solvency score in comparison to other Public Sector Banks is the United Bank of India which is followed by Vijaya Bank.

TABLE 3 BANKOMETER FINAL RESULTS FOR THE YEAR 2014-15

Name of the Bank	Capital Adequacy Ratio	Capital to Assets	Equity to Assets	NPA to Loan	Cost to Income	Loans to Assets	Solvency Score	Rank
ALLAHABAD BANK	10.45	0.25	10.88	3.99	17.11	66.00	83.94	15
ANDHRA BANK	10.63	0.33	10.54	2.93	15.33	68.02	83.91	16
BANK OF BARODA	12.61	0.06	11.08	1.89	16.20	59.87	87.47	9
BANK OF INDIA	10.73	0.11	10.06	3.36	16.97	64.98	82.88	18
BANK OF MAHARASHTRA	11.94	0.73	10.32	4.19	18.48	67.52	90.33	4
CANARA BANK	10.56	0.09	11.54	2.65	15.04	60.23	81.13	21
CENTRAL BANK OF INDIA	10.90	0.53	10.66	3.61	19.72	60.42	83.99	14
CORPORATION BANK	11.09	0.07	9.20	3.08	12.00	64.19	81.10	22
DENA BANK	10.93	0.43	11.02	3.82	16.01	60.76	83.53	17
IDBI BANK LIMITED	11.76	0.45	13.21	2.88	12.52	58.51	86.57	10
INDIAN BANK	12.86	0.25	15.41	2.50	16.33	65.27	96.38	1
INDIAN OVERSEAS BANK	10.11	0.43	10.52	5.68	16.11	60.13	80.95	23
ORIENTAL BANK OF COMMERCE	11.41	0.13	11.83	3.34	14.76	63.02	85.96	11
PUNJAB AND SIND BANK	11.24	0.41	11.04	3.55	14.78	65.34	85.90	12
PUNJAB NATIONAL BANK	12.21	0.06	12.89	4.06	20.10	63.07	91.99	2
STATE BANK OF BIKANER AND JAIPUR	11.57	0.07	11.69	2.54	17.76	67.98	88.67	6
STATE BANK OF HYDERABAD	11.26	0.01	12.41	2.24	18.51	67.99	88.42	7
STATE BANK OF INDIA	12.00	0.04	12.51	2.12	21.75	63.48	90.25	5
STATE BANK OF MYSORE	11.42	0.06	12.35	2.16	19.77	65.47	88.30	8
STATE BANK OF PATIALA	12.06	0.41	12.00	3.88	17.65	67.38	91.81	3
STATE BANK OF TRAVANCORE	10.89	0.06	9.89	2.04	18.20	65.08	82.78	19
SYNDICATE BANK	10.54	0.22	8.40	1.90	15.27	66.87	79.77	25
UCO BANK	12.17	0.44	9.77	4.30	12.43	59.92	85.25	13
UNION BANK OF INDIA	10.22	0.17	10.19	2.71	17.25	66.99	81.85	20
UNITED BANK OF INDIA	10.57	0.68	8.79	6.22	15.17	54.27	78.56	26
VIJAYA BANK	11.43	0.60	8.04	1.92	14.54	60.80	80.39	24

Source: Compiled from Statistical Tables Relating to Banks in India: RBI

The above Table 3 consists of data related with the computation of solvency scores using the Bankometer Model for the year 2014-15 and the solvency scores computed are also given in the table. As per the information of table, Indian Bank followed by Bank of Baroda is found to be at the top in terms of Capital Adequacy Ratio and the bank at the bottom place in case of this ratio is Indian Overseas Bank followed by Union Bank of India. All the selected banks have their Capital Adequacy Ratio exceeding 10 percent and on the basis of this level of ratio, it may be concluded that all the Public Sector Banks are good in terms of capital. The best level of Capital to Assets Ratio has been found for Bank of Maharashtra followed by United Bank of India and the lowest level of this ratio has been found for State Bank of Hyderabad followed by State Bank of India among the group of Public Sector Banks. The Equity to Assets Ratio of Indian Bank followed by IDBI Bank Ltd. is found at the top in comparison to other selected banks. The bottom position in terms of this ratio is acquired by Vijaya Bank followed by Syndicate Bank. The non-performing assets are lowest in case of Bank of Baroda (1.89); this is why the first position has been assigned to this bank. The rank of second performer is given to Syndicate Bank as its NPA are second highest i.e. 1.9. The non-performing assets are highest in case of United Bank of India followed by Indian Overseas

Bank and UCO Bank. The Cost to Income Ratio has been found the minimum in case of Corporation Bank due to this level of ratio the bank is given top performance position and this top position is followed by UCO Bank. The bottom performer in case of Cost to Income Ratio is the State Bank of India followed by Punjab National Bank. When the Loans to Assets Ratio is analyzed, it is found that the best level of ratio has been obtained by Andhra Bank which is followed by State Bank of Hyderabad. The bottom performance position has been acquired by United Bank of India followed by IDBI Bank Ltd.

As per the solvency scores computed with the help of Bankometer Model, all the banks have solvency scores exceeding the prescribed limit of 70 percent. It shows the financial soundness of all the selected Public Sector Banks in term of solvency. The most solvent bank among the group of Public Sector Banks is the Indian Bank for the financial year 2014-15. This top performance is followed by the Punjab National Bank. The bank having the lower solvency score in comparison to other Public Sector Banks is the United Bank of India and the second lower solvent bank for the year is the Syndicate Bank. In overall it can be said that the all the banks are financial sound banks for the financial year 2014-15.

TABLE 4 BANKOMETER FINAL RESULTS FOR THE YEAR 2015-16

Name of the Bank	Capital Adequacy Ratio	Capital to Assets	Equity to Assets	NPA to Loan	Cost to Income	Loans to Assets	Solvency Score	Rank
ALLAHABAD BANK	11.02	0.26	11.47	6.76	17.67	63.53	87.49	12
ANDHRA BANK	11.58	0.34	10.66	4.61	15.24	65.41	87.33	13
BANK OF BARODA	13.18	0.07	11.91	5.06	18.19	57.16	91.88	4
BANK OF INDIA	12.01	0.13	10.04	7.79	20.55	58.89	88.68	10
BANK OF MAHARASHTRA	11.20	0.73	10.19	6.35	18.14	66.83	88.50	11
CANARA BANK	11.08	0.10	11.33	6.42	15.32	58.72	84.46	20
CENTRAL BANK OF INDIA	10.40	0.55	11.02	7.36	23.94	58.93	85.63	15
CORPORATION BANK	10.56	0.09	9.59	6.53	13.62	59.75	80.50	25
DENA BANK	11.00	0.50	10.20	6.35	19.96	61.70	85.97	14
IDBI BANK LIMITED	11.67	0.55	14.22	6.78	13.13	57.51	89.74	6
INDIAN BANK	13.20	0.24	15.73	4.20	17.73	63.35	98.61	1
INDIAN OVERSEAS BANK	9.67	0.66	10.76	11.89	19.30	58.61	84.11	21
ORIENTAL BANK OF COMMERCE	11.76	0.13	12.33	6.70	15.77	62.09	89.74	7
PUNJAB AND SIND BANK	10.91	0.39	11.25	4.62	15.01	62.31	84.47	19
PUNJAB NATIONAL BANK	11.28	0.06	11.42	8.61	18.67	61.78	88.75	9
STATE BANK OF BIKANER AND JAIPUR	10.44	0.06	12.16	2.75	19.31	66.12	85.12	17
STATE BANK OF HYDERABAD	11.62	0.01	12.62	3.37	17.57	67.48	90.12	5
STATE BANK OF INDIA	13.12	0.03	12.21	3.81	21.78	62.08	94.27	2
STATE BANK OF MYSORE	12.43	0.06	12.58	4.18	21.11	65.02	93.53	3
STATE BANK OF PATIALA	10.88	0.50	11.48	3.98	16.58	62.42	84.94	18
STATE BANK OF TRAVANCORE	11.60	0.06	10.45	2.77	17.70	57.17	83.08	23
SYNDICATE BANK	11.16	0.23	7.78	4.48	20.39	65.39	83.70	22
UCO BANK	9.63	0.44	9.79	9.09	14.09	51.41	76.36	26
UNION BANK OF INDIA	10.56	0.17	11.14	5.25	17.59	66.06	85.44	16
UNITED BANK OF INDIA	10.08	0.65	8.37	9.04	26.07	52.58	80.58	24
VIJAYA BANK	12.58	0.64	9.85	4.80	16.10	61.20	89.00	8

Source: Compiled from Statistical Tables Relating to Banks in India: RBI

In the above Table 4, the data required for computation of solvency score is compiled and the computed solvency score using Bankometer Model is presented for the year 2015-16. According to the date of the table, the first ratio is the Capital Adequacy Ratio and the as per the figures of this ratio, the Indian Bank is at the top followed by Bank of Baroda. The bottom performance position is acquired by UCO Bank followed by Indian Overseas Bank. The capital position of all the banks may be considered good as all the banks have Capital Adequacy Ratio exceeding the minimum prescribed level of ratio. Capital to Assets Ratio of Bank of Maharashtra has been found at the top. The second top performer bank in case of this ratio is Indian Overseas Bank. The bottom performance position for Capital to Assets Ratio has been obtained by State

Bank of Hyderabad followed by State Bank of India. When the Equity to Assets Ratio is analyzed, Indian Bank followed by IDBI Bank Ltd. has been found performing at a level which is higher than the other selected Public Sector Banks. Syndicate Bank followed by United Bank of India has been found performing at a lower level among the group of Public Sector Banks in terms of Equity to Assets Ratio. State Bank of Bikaner and Jaipur has been found at the top performance position as the non-performing assets are least i.e. 2.75%. The second performer position is assigned to State Bank of Travancore. The non-performing assets are highest in case of Indian Overseas Bank i.e. 11.89%. The second highest non-performing assets have been found in case of UCO Bank. IDBI Bank Ltd. followed by Corporation Bank has been found as best in terms of Cost to Income Ratio as the value of ratio is lowest for IDBI Bank Ltd which is a good indicator of financial soundness. The lowest performance position in terms of Cost to Income Ratio is acquired by United Bank of India followed by Corporation Bank. The Loans to Assets Ratio has been found best for State Bank of India followed by the Bank of Maharashtra as the ratio is highest in case of this bank. The lowest ratio has been found for the UCO Bank followed by United Bank of India which may be a threat to the solvency of the bank in future. All the banks for the year 2015-16 have solvency scores exceeding the prescribed limit of 70 percent according to the solvency scores computed with the help of Bankometer Model. It means that in term of solvency all the selected banks may be considered as financially sound. The most solvent bank among the group of Public Sector Banks is the Indian Bank for the financial year 2016 and this top position is followed by State Bank of India. The lowest solvency score has been found in case of UCO Bank in comparison to other Public Sector Banks which is followed by Corporation Bank.

TABLE 5 BANKOMETER FINAL RESULTS FOR THE YEAR 2016-17

Name of the Bank	Capital Adequacy Ratio	Capital to Assets	Equity to Assets	NPA to Loan	Cost to Income	Loans to Assets	Solvency Score	Rank
ALLAHABAD BANK	11.45	0.31	11.75	8.92	20.02	63.60	91.44	4
ANDHRA BANK	12.38	0.31	9.93	7.57	16.98	61.61	89.98	7
BANK OF BARODA	12.24	0.07	11.53	4.72	18.99	55.16	87.37	17
BANK OF INDIA	12.14	0.17	9.66	6.90	19.25	58.51	87.65	16
BANK OF MAHARASHTRA	11.18	0.73	8.53	11.76	21.04	59.95	87.82	14
CANARA BANK	12.86	0.10	11.44	6.33	17.39	58.61	91.36	5
CENTRAL BANK OF INDIA	10.94	0.57	9.79	10.20	23.10	41.81	80.67	24
CORPORATION BANK	11.32	0.09	10.16	8.33	13.75	56.62	83.73	21
DENA BANK	11.39	0.61	11.25	10.66	19.85	55.99	89.02	10
IDBI BANK LIMITED	10.70	0.57	11.91	13.21	16.19	52.75	86.47	20
INDIAN BANK	13.64	0.22	15.51	4.39	18.39	58.52	98.24	1
INDIAN OVERSEAS BANK	10.49	0.99	10.13	13.99	21.27	56.83	87.87	12
ORIENTAL BANK OF COMMERCE	11.64	0.14	11.02	8.96	16.54	62.32	89.44	9
PUNJAB AND SIND BANK	11.05	0.41	12.30	7.51	17.09	60.36	87.83	13
PUNJAB NATIONAL BANK	11.66	0.06	11.56	7.81	16.68	58.24	87.76	15
STATE BANK OF BIKANER AND JAIPUR	9.00	0.06	10.86	10.53	22.25	55.75	79.92	25
STATE BANK OF HYDERABAD	11.72	0.01	10.88	12.84	18.56	48.64	86.82	19
STATE BANK OF INDIA	13.11	0.03	13.89	3.71	22.03	58.06	94.65	2
STATE BANK OF MYSORE	12.41	0.05	8.49	16.89	25.00	38.74	86.83	18
STATE BANK OF PATIALA	11.18	2.42	11.39	15.48	20.38	57.01	94.63	3
STATE BANK OF TRAVANCORE	12.19	0.06	6.96	10.22	21.92	38.61	79.25	26
SYNDICATE BANK	12.03	0.30	9.18	5.21	20.79	66.76	89.65	8
UCO BANK	10.93	0.67	10.35	8.94	16.30	51.75	82.64	23
UNION BANK OF INDIA	11.79	0.15	10.44	6.57	17.11	63.28	88.41	11
UNITED BANK OF INDIA	11.14	0.99	9.40	10.02	22.05	46.89	83.14	22
VJAYA BANK	12.73	0.64	9.88	4.36	19.50	61.05	90.27	6

Source: Compiled from Statistical Tables Relating to Banks in India: RBI

The table includes the data needed for computation of solvency score using Bankometer Analysis. As per the figures of the table, Capital Adequacy Ratio of Indian Bank followed by State Bank of India has been found at the top in comparison to the other Public Sector Banks. The value of Capital Adequacy Ratio is the minimum in case of State Bank of Bikaner and Jaipur and the second bottom performer is the Indian Overseas Bank. The second variable is the Capital to Assets Ratio and as this ratio State Bank of Patiala is the top performing bank followed by the Indian Overseas Bank. The bottom performance position has been acquired by the State Bank of Hyderabad followed by State Bank of India which is an indication of weak solvency position for the bank. The Equity to Assets Ratio of Indian Bank is the best among the group of Public Sector Banks and this best performance is followed by State Bank of India. The bottom performer in case of Equity to Assets Ratio is the State Bank of Travancore followed by State Bank of Mysore. As per the Non-performing loans to Loans ratio is considered, it is found that the ratio is the minimum in case of State Bank of India followed by Vijaya Bank which means that the State Bank of India is able to recover the loans sanctions by the bank. The weak performance in case of this ratio is in case of State Bank of Mysore followed by State Bank of Patiala as the ratio is highest in case of State Bank of Mysore. In case of Cost to Income Ratio, the Corporation Bank and IDBI Bank Ltd. are the top two performers and among the group of Public Sector Banks are able to earn higher income in comparison to the expenses incurred by the banks. The Loans to Assets Ratio has been found highest for Syndicate Bank followed by Allahabad Bank which is a good indicator of financial soundness. The lower level of ratio has been found for State Bank of Travancore followed by the State Bank of Mysore.

According to the solvency scores computed with the help of Bankometer Model, all the selected Public Sector Banks have solvency scores exceeding the prescribed limit of 70 percent for the year 2016-17. It means that all the selected banks are financially sound in term of solvency. The most solvent bank among the group of Public Sector Banks is the Indian Bank for the financial year 2016-17. The second top performer is State Bank of India. The bank having the lower solvency score in comparison to other Public Sector Banks is the State Bank of Travancore and the second lower solvent bank for the year is the State Bank of Bikaner and Jaipur. In overall it can be said that the all the banks are the financial sound banks for the financial year 2016-17.

The above Table 5 shows the performance of Public Sector Bank in terms of solvency for the year 2016-17.

CONCLUSION

In the present study, the financial soundness of Public Sector Banks of India has been analyzed using the Bankometer Model and in results, it is found that all the selected Public Sector Banks are financially sound as their efficiency score exceeds the limit provided by the International Monetary Fund for the financial soundness of the banks. The most financially sound bank is the Indian Bank which is the top performer among the group for the entire study period. The solvency position of the State Bank of India has been found good as it is in the top two most solvent banks for four years out of total five years of the study.

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