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## COMPARATIVE STUDY OF SELECTED URBAN CO-OPERATIVE BANKS IN PUNE AND NAGPUR BASED ON CAMEL MODEL

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### ABSTRACT

Urban co-operative banks are an integral part of the banking system. Their survival, growth, and development depend upon various factors like profitability, capital base, the volume of business operational efficiency, NPAs, etc. With limited resources, they find it difficult to grow many times their survival also becomes difficult. Some banks are performing best. For example, recently Model Co-operative Bank Ltd. Mumbai has been awarded by the Maharashtra State Co-operative Bank Association Ltd. for best bank among Co-operative Banks in the Mumbai region in the category of deposits above Rs. 500 crores.

In the year 2020 SVC Co-operative Bank Ltd. has been awarded for best co-operative bank and most future-ready bank. However certain banks like CKP Co-operative Bank Ltd., Navodaya Urban Co-operative Bank Ltd., Nagpur, etc. are the examples failed banks. This indicates that some banks are doing excellent performance while some are getting a failure. All this has necessitated studying the comparison of the financial performance of Urban Co-operative banks.

**KEYWORDS:** Urban Co-Operative Banks, CAMEL MODEL, Performance

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### INTRODUCTION

Urban co-operative banks are more than 100 years old. In India co-operative movement started in the 19<sup>th</sup> century. In October 1904 1<sup>st</sup> Urban Credit Society was registered in Canjeevaram in Madras Province. Few societies were formed in Madras and Bombay provinces... The Mehta Bhansali Committee, 1939 defined, for the first time, an 'Urban Co-operative Bank'. The term Urban Co-operative Banks (UCBs), though not formally defined, refers to primary cooperative banks located in urban and semi-urban areas.

Maximum co-operative banks are located in the states of Maharashtra, Gujrat, and Karnataka. They help in channelizing the small savings of the people into profitable ventures by helping small, medium, and nowadays some big entrepreneurs also. In the years 2014-15, 2015-16, and 2016-17 there were 1579, 1574, and 1562 urban co-operative banks respectively. This indicates that every year some urban co-operative banks are falling, which is not a good sign. During the last few years, the licenses of some urban co-operative banks have also been canceled by RBI due to financial irregularities while some banks are under the close watch by RBI. Hence it is necessary to make the comparative study of the financial performance of urban co-operative banks.

### Objectives of the Study

- To analyze capital adequacy of the banks between two regions.
- To analyze the asset quality of the banks between the two regions.

- To analyze the management efficiency of the banks between the two regions.
- To analyze the earning capacity of the banks between the two regions.
- To analyze the liquidity of the banks between the two regions.

## REVIEW OF LITERATURE

**Nagaraja R.C.**, Assistant Professor, Department of Commerce, Government First Grade College, Holalkere and **J. Madegowda**, Professor, Department of Commerce, Kuvempu University, Jnana Sahyadri, Shankaraghatta published a paper on A Comparative Study of Non Performing Assets in DCCBs and UCBs. After making a comparative analysis of Gross NPA and NPA between three DCCBs (namely, Bagalkot DCCB, Bijapur DCCB & Davangere DCCB) and Basaveshwara UCB Bagalkot, DAVANGERE UCB Davangere, Merchant UCB Gadag), the study found that the NPAs are high in UCBs as compared to DCCBs, which is affecting the profitability of the bank adversely and hence the management of UCBs should take serious efforts.

**Prof. Bharati R. Hiremath**, M. Com, M. Phil, (Ph.D.) Lecturer Research Scholar: Research and Development Centre, Bharathiar University, Coimbatore-641 046 published a research article on Analysis of the financial performance of co-operative banks in the Bijapur District (Karnataka State): A comparative study. After studying the various financial ratios of twenty banks in Bijapur District for the period, 2008-09 to 2012-13 the researcher found that the banks are facing g problems of the high cost of business operations, low capital base, inadequate loan appraisal, and credit planning, poor recovery performance, mounting overdue, high level of nonperforming assets, political influence, lack of professional skills and relatively low level of customer satisfaction, etc. Hence, the researcher has tried to suggest the measures to improve the financial strength as well as the overall efficiency in both administration and operational management and to overcome the existing deficiency and irregularities of the selected UCBs in the Bijapur district.

**Manisha D. Patel** (June 2016) Assistant Professor Humanities and Social Science Department, 1 Shree Swami AtmanandSaraswati Institute of Technology, Surat, Gujarat, India published a research article on Ratio Analysis of Co-operative Banks of Surat. She studied VARACHHA Co-operative Bank, THE SARVODAYA SAHKARI BANK.LTD and SURAT NATIONAL CO OP. BANK LTD (all Surat Based) based on various financial ratios (for the period – 2007-08 to 2011-12). She found the major problem of all the banks is NPA. She also found a poor resource base and conservative credit policy. Hence she suggested for better management of NPAs and a high degree of professionalism.

**Ruth Smiley.S P.hD** (Research Scholar) **Dr. P.Kannapiran** Assistant Professor & Head in their research article named “A STUDY ON FINANCIAL PERFORMANCE OF NILGIRIS DISTRICT CENTRAL CO-OPERATIVE BANK LIMITED, TAMIL NADU” after studying various factors for the period 2012-13-2016-17, they found that Nilgiris District Central Co-operative Bank obtained significant growth in earnings and revealed a good performance

**Damayanti Reuel Premier**, Asst. Professor, Shankar Narayan College of Arts, Commerce and Self Finance Courses. Bhayandar (East) (MS) INDIA published a paper on Financial Analysis Of Thane District Central Co-Operative Bank. After studying the annual reports of Thane District Central Co-Operative Bank, for two years (that is 2013-14 and 2014-15) it was recommended that the bank there must be an improvement in the credit deposit ratio, modern marketing strategies should be introduced, the bank should generate non-interest income.

**Smt. R. S. Renuka** Research Scholar, DoS in Economics and Cooperation, Manasagangotri, University of Mysore, **Dr. A. R. Viswanatha** Research Scholar, DoS in Economics and Cooperation, Manasagangotri, University of Mysore, Mysore Corresponding Author published a paper on A Comparative Analysis Of MahilaSahakara Banks In Karnataka. The researchers studied Mysore Zilla, Mahila Sahakara Bank Niyamita, Mysore, and Lokapavan Mahila Sahakara Bank Niyamita, Mandya by taking the financial data concerning share capital, reserve fund, deposits, loans & advances, and investments, for 15 years, that is form 2002-03 to 2016-17. The study found that there is a significant difference share capital, reserve fund, deposits, loans & advances and investments

**RESEARCH METHODOLOGY**

The study is descriptive and is based on secondary data drawn from the annual reports from the following four banks of Pune and four banks in Nagpur in Maharashtra

- Shree Sharada Sahakari Bank Ltd., Pune (SSSBL)
- The Muslim Co-operative Bank Ltd.,Pune(MCBL)
- Pune Merchants Co-operative Bank Ltd., Pune (PMCBL)
- SampadaSahakari Bank Ltd., Pune (SSBL)
- Dr. Baba Saheb Ambedkar Urban Co-operative Bank Ltd., Nagpur (DBSAUCBL)
- The ChitanvispuraSahakari Bank Ltd., Nagpur (CSBL)
- GandhibagSahakari Bank Ltd., Nagpur (GSBL)
- Tirupati Urban Co-operative Bank Ltd., Nagpur (TUCBL)

A data of 5 years that is from the year 2012-13 to 2016-17 have been taken into consideration for the study purpose. The financial performance of the above mentioned four banks has been assessed based on CAMEL Model. Various ratios have been calculated. And the statistical toll of the T-test has been used.

**Table 1**

<b>C</b>	<b>CAPITAL ADEQUACY RATIOS</b>	(i)Capital Adequacy Ratio,
		(ii)Debt -Equity Ratio,
		(iii)Advances to Total Assets
		(vi)Government Securities to total Investment Ratio
<b>A</b>	<b>ASSETS QUALITY RATIOS:</b>	(i)Gross NPA to Net Advances,
		(ii)Net NPA to Net Advances,
		(iii)Total Investments to Total Assets Ratio
		(iv)Net NPAS to Total Assets Ratio.
<b>M</b>	<b>MANAGEMENT CAPABILITY RATIOS:</b>	(i)Total Advances to Total Deposits Ratio
		(ii)Business per Employee Ratio
		(iii)Profit Per Employee Ratio
<b>E</b>	<b>EARNING RATIOS:</b>	(i)Operating Profit to Working Fund Ratio,
		(ii)Spread to total Assets Ratio.
		(iii)Net Profit to Average Assets Ratio.
		(iv)Interest Income to Total Income Ratio.
<b>L</b>	<b>LIQUIDITY RATIOS:</b>	(i)Liquid Assets to Total Assets Ratio.
		(ii)G-Sec. to Total Assets Ratio.
		(iii)Liquid Assets to Demand Deposits Ratio.
		(iv)Liquid Assets to Total Deposits Ratio



**HYPOTHESIS**

- Ho1. There is no significant difference between the CRAR among two regions of the selected banks during the study.
- Ho2. There is no significant difference between the Debt-Equity ratio among two regions of the selected banks during the study.
- Ho3. There is no significant difference between Advances to Total Assets ratio among two regions of the selected banks during the study.
- Ho4. There is no significant difference between Government Securities to Total Investment ratio among two regions of the selected banks during the study.
- Ho5. There is no significant difference between Gross NPAs and Net Advances ratio among two regions of the selected banks during the study.
- Ho6. There is no significant difference between NET NPAs and Net Advances ratio among two regions of the selected banks during the study.
- Ho7. There is no significant difference between the Total Investment Total Assets ratio among two regions of the selected banks during the study.
- Ho8. There is no significant difference between Net NPA to Total assets ratio among two regions of the selected banks during the study.
- Ho9. There is no significant difference between Total Advances to Total Deposit ratio among two regions of the selected banks during the study.
- Ho10. There is no significant difference between the Business Per Employee ratio among two regions of the selected banks during the study.
- Ho11. There is no significant difference between Profit Per Employee among two regions ratio of the selected banks during the study.
- Ho12. There is no significant difference between Operating Profit to the Working Fund ratio among two regions of the selected banks during the study.
- Ho13. There is no significant difference between the Spread to the Total Asset ratio among two regions of the selected banks during the study.
- Ho14. There is no significant difference between Net Profit to the Average Asset ratio among two regions of the selected banks during the study.
- Ho15. There is no significant difference between Interest Income to Total Income ratio among two regions of the selected banks during study
- Ho16. There is no significant difference between Liquid Assets to Total Assets ratio among two regions of the selected banks during study

- Ho17 There is no significant difference between G-SEC to Total Assets ratio among two regions of the selected banks during study
- Ho18 There is no significant difference between Liquid Assets to Demand Deposits ratio among two regions of the selected banks during study
- Ho19 There is no significant difference between Liquid Assets to Total Deposits ratio among two regions of the selected banks during study

## RESULTS AND DISCUSSIONS

Table 2

Region Nagpur = 1 And Pune = 2	CRAR From 2012-13 To 2016-17	Debt Equity Ratio From 2012-13 To 2016-17	Advances To Total Assets From 2012-13 To 2016-17	Govt. Sec. To Total Investments From 2012-13 To 2016-17
1	18.04	0.45	0.42	0.51
1	17.05	0.00	0.41	0.54
1	17.60	0.00	0.42	0.62
1	15.86	0.00	0.39	0.55
1	20.40	0.00	0.36	0.65
1	18.51	0.00	0.58	0.66
1	19.01	0.00	0.59	0.68
1	20.60	0.00	0.57	0.69
1	20.35	0.00	0.56	0.60
1	19.55	0.00	0.50	0.53
1	14.11	0.00	0.60	0.75
1	12.78	0.00	0.61	0.79
1	12.74	0.00	0.62	0.69
1	12.44	0.00	0.60	0.56
1	13.63	0.00	0.56	0.55
1	16.91	0.00	0.54	0.61
1	17.05	0.03	0.53	0.69
1	18.38	0.03	0.53	0.67
1	18.44	0.04	0.48	0.65
1	17.00	0.00	0.49	0.68
Mean For 1	17.02	0.0275	0.52	0.63
S.D. For 1	2.63	0.10	0.08	0.08
Rank	2	2	1	2
2	18.62	0.00	0.52	0.51
2	17.88	0.20	0.55	0.55
2	20.58	0.00	0.49	0.67
2	17.43	0.00	0.54	0.67
2	19.69	0.00	0.45	0.73
2	19.15	0.00	0.53	0.63
2	19.15	0.00	0.53	0.59
2	19.78	0.00	0.53	0.58
2	21.35	0.00	0.52	0.52
2	24.38	0.00	0.47	0.64
2	18.68	0.00	0.44	0.45
2	19.74	0.00	0.45	0.44
2	21.40	0.00	0.45	0.62
2	21.08	0.00	0.46	0.66
2	22.35	0.00	0.43	0.83
2	15.13	0.30	0.49	0.82

2	14.90	0.00	0.50	0.81
2	13.88	0.00	0.48	0.67
2	14.09	0.00	0.49	0.81
2	13.64	0.00	0.45	0.67
Mean For 2	18.65	0.0250	0.49	0.64
S.D. For 2	3.01	0.08	0.04	0.12
Rank	1	1	2	1
t test P value	0.077782807	0.930543264	0.14888563	0.75086127

Ho1. There is no significant difference between the CRAR among two regions of the selected banks during the study. [**p-value = 0.077782807 therefore Null Hypothesis Accepted**]

Ho2 There is no significant difference between the Debt-Equity ratio among two regions of the selected banks during the study. [**p-value = 0.930543264 therefore Null Hypothesis Accepted**]

Ho3 There is no significant difference between Advances to Total Assets ratio among two regions of the selected banks during the study. [**p-value = 0.14888563 therefore Null Hypothesis Accepted**]

Ho4 There is no significant difference between Government Securities to Total Investment ratio among two regions of the selected banks during the study. [**p-value = 0.75086127 therefore Null Hypothesis Accepted**]

### Analysis

Table – 2 show that the banks in both regions have maintained a good level of CRAR. Because as per RBI norms it should be 9%. The banks in Pune region have maintained more levels of CRAR compared to banks in the Nagpur region. Further, it shows that in all the selected banks, (in case of both the regions) there is very little burden of external debt. It also shows that the advances to total assets ratio falls between 0.49 to 0.52, which indicates that the banks in both regions are not very much aggressive in their lending practices and on average the banks in Nagpur and Pune regions have invested 63 % and 64% in government securities respectively.

**Table 3**

Region Nagpur = 1 And Pune = 2	Gross NPA To Net Advances From 2012-13 To 2016-17	Net NPA To Net Advances From 2012-13 To 2016-17	Total Investments To Total Assets From 2012-13 To 2016-17	Net NPA To Total Assets From 2012-13 To 2016-17
1	0.19	0.02	0.26	0
1	0.16	0.04	0.29	0.02
1	0.18	0.06	0.24	0.02
1	0.3	0.15	0.28	0.05
1	0.29	0.15	0.22	0.05
1	0.06	0.02	0.36	0
1	0.06	0.02	0.34	0.01
1	0.07	0.03	0.35	0.02
1	0.08	0.04	0.38	0.02
1	0.07	0.03	0.42	0.01
1	0.02	0	0.30	0
1	0.04	0.03	0.32	0.02
1	0.09	0.08	0.28	0.05
1	0.05	0.03	0.32	0.02
1	0.06	0.05	0.33	0.05
1	0.02	0	0.33	0
1	0.02	0	0.35	0
1	0.03	0.01	0.37	0

1	0.03	0.02	0.39	0
1	0.05	1	0.39	0.01
Mean For 1	0.09	0.0890	0.33	0.018
S.D. For 1	0.09	0.22	0.05	0.02
Rank	2	2	1	2
2	0.02	0	0.41	0
2	0.02	0	0.38	0
2	0.02	0	0.41	0
2	0.02	0	0.36	0
2	0.04	0	0.44	0
2	0.04	-0.02	0.35	0
2	0.10	0.04	0.35	0.02
2	0.06	0	0.34	0
2	0.08	0.03	0.36	0.01
2	0.10	0.05	0.34	0.02
2	0.07	0	0.47	0
2	0.05	0	0.49	0
2	0.02	0	0.44	0
2	0.03	0	0.45	0
2	0.03	0	0.46	0
2	0.05	0.02	0.25	0
2	0.05	0.01	0.24	0
2	0.06	0	0.26	0
2	0.07	0.01	0.22	0
2	0.07	0	0.27	0
Mean For 2	0.05	0.0070	0.36	0.003
S.D. For 2	0.03	0.02	0.08	0.01
Rank	1	1	2	1
t test P value	0.03997138	0.11065948	0.089582226	0.002395764

Ho5. There is a significant difference between the Gross NPA To Net Advances among two regions of the selected banks during the study. [**p-value** = 0.03997138

**Therefore Null Hypothesis Rejected]**

Ho6 There is no significant difference between the Net NPA to Net Advances among two regions of the selected banks during the study. [**p-value** =0.11065948

**Therefore Null Hypothesis Accepted]**

Ho7 There is no significant difference between Total Investments To Total Assets ratio among two regions of the selected banks during the study. [**p-value** =0.089582226

**Therefore Null Hypothesis Accepted]**

Ho8 There is a significant difference between Net NPA To Total Assets ratio among two regions of the selected banks during the study. [**p-value** = 0.002395764 **Therefore Null Hypothesis Rejected]**

### Analysis

Table – 3 shows that the banks in Pune region have a better quality of assets compared to the banks in the Nagpur region. Further it shows that on average out of the total assets only 33% and 36 % have been deployed in investment by Nagpur and Pune regions respectively. It also shows that regarding Net NPA to Total Assets ratio is concerned the banks in Nagpur have 2% and the banks in Pune have 0%.



Table 4

Region Nagpur = 1 And Pune = 2	Total Adv. To Total Deposits From 2012-13 To 2016-17	Business Per Employee From 2012-13 To 2016-17	Profit Per Employee From 2012-13 To 2016-17
1	0.69	1.69	0
1	0.65	1.80	0
1	0.68	1.80	0
1	0.59	1.78	0
1	0.56	1.91	0
1	0.71	1.94	0.02
1	0.72	2.22	0.02
1	0.69	2.38	0.02
1	0.67	2.60	0.02
1	0.61	3.01	0.02
1	0.66	3.69	0
1	0.70	4.02	0.01
1	0.69	4.80	0
1	0.66	5.48	0.01
1	0.63	6.71	0.02
1	0.60	4.68	0.03
1	0.60	4.60	0.03
1	0.60	4.60	0.03
1	0.56	5.39	0.04
1	0.56	6.47	0.04
Mean For 1	0.64	3.5785	0.0155
S.D. For 1	0.05	1.67	0.01
Rank	1	2	2
2	0.60	3.76	0.02
2	0.63	4.34	0.02
2	0.56	4.63	0.03
2	0.62	4.94	0.02
2	0.51	5.26	0.02
2	0.67	2.70	0.02
2	0.66	2.92	0.02
2	0.65	3.13	0.02
2	0.65	3.19	0.02
2	0.58	3.71	0.02
2	0.55	3.44	0.02
2	0.54	3.44	0.01
2	0.54	3.11	0.02
2	0.55	3.59	0.02
2	0.55	3.73	0.02
2	0.63	2.83	0.02
2	0.64	3.17	0.03
2	0.62	3.33	0.03
2	0.65	3.31	0.03
2	0.61	3.40	0.02
Mean For 2	0.60	3.5965	0.0215
S.D. For 2	0.05	0.69	0.00
Rank	2	1	1
t test P value	0.01498114	0.96491291	0.081948169

Ho9 There is a significant difference between the Total Advances to Deposits among two regions of the selected banks during the study. [**p-value** =0.01498114 **therefore Null Hypothesis Rejected**]

Ho10 There is no significant difference between the Business Per Employee ratio among two regions of the selected banks during the study. [p-value =0.96491291 Therefore Null Hypothesis Accepted]

Ho11 There is no significant difference between the Profit Per Employee ratio among two regions of the selected banks during the study. [p-value =0.081948169 Therefore Null Hypothesis Accepted]

**Analysis**

Table 4 shows that on average the ratio of Advances to Total Deposits is 64% and 60% for the banks in Nagpur and Pune regions respectively. Further, it shows that on average Business per Employee is 3.58 and 3.60for the banks in the Nagpur region and Pune region respectively. It also shows that on an average Profit per Employee ratio is almost all same for the banks in both the regions.

**Table 5**

Region Nagpur = 1 And Pune = 2	Operating Profit To Working. Fund From 2012-13 To 2016-17	Spread To Total Assets From 2012-13 To 2016-17	Net Profit To Average Assets From 2012-13 To 2016-17	Interest Income To Total Income From 2012-13 To 2016-17
1	0.02	12.92	0	0.98
1	0.02	19.01	0	0.96
1	0.01	16.62	0	0.98
1	0	13.22	0	0.99
1	0.03	22.25	0	0.94
1	0.02	4.26	0.01	0.94
1	0.02	4.53	0.01	0.93
1	0.02	4.47	0.01	0.93
1	0.02	4.21	0.01	0.93
1	0.01	3.46	0	0.92
1	0	1.65	0	0.93
1	0	1.88	0	0.92
1	0	2.48	0	0.96
1	0	2.41	0	0.96
1	0	1.7	0	0.93
1	0.01	1.2	0.01	0.89
1	0.01	1.15	0	0.94
1	0.02	1.06	0	0.90
1	0.01	1.04	0	0.92
1	0	0.76	0	0.88
Mean For 1	0.0110	6.0140	0.00250	0.937
S.D. For 1	0.01	6.75	0.00	0.03
Rank	2	1	1	1
2	0.01	0.92	0	0.96
2	0	0.68	0	0.97
2	0.01	1.02	0	0.94
2	0.01	0.81	0	0.94
2	0	0.94	0	0.88
2	0.02	1.13	0	0.97
2	0.01	1.11	0	0.95
2	0.02	1.21	0	0.98
2	0.01	0.88	0	0.97
2	0.02	0.77	0	0.93
2	0.01	4.69	0	0.98
2	0.01	3.26	0	0.98
2	0.01	3.4	0	0.93
2	0.01	2.85	0	0.93

2	0.01	3.18	0	0.92
2	0.02	3.1	0.01	0.93
2	0.02	3.63	0.01	0.91
2	0.02	3.16	0.01	0.76
2	0.02	3.09	0.01	0.88
2	0	2.79	0	0.87
Mean For 2	0.0120	2.1310	0.00200	0.929
S.D. For 2	0.01	1.28	0.00	0.05
Rank	1	2	2	2
t test P value	0.709875917	0.02002285	0.713645893	0.578735132

Ho12 There is no significant difference between the Operating Profit To Working Fund ratio among two regions of the selected banks during the study. [**p-value =0.709875917 therefore Null Hypothesis Accepted**]

Ho13 There is a significant difference between the Spread To Total Asset ratio among two regions of the selected banks during the study. [**p-value =0.02002285 therefore Null Hypothesis Rejected**]

Ho14 There is no significant difference between the NetProfit To Average Assets ratio among two regions of the selected banks during the study. [**p-value =0.713645893 therefore Null Hypothesis Accepted**]

Ho15 There is no significant difference between Interest Income to Total Income ratio among two regions of the selected banks during the study. [**p-value =0.578735132 therefore Null Hypothesis Accepted**]

### Analysis

Table 5 shows that average banks in both regions have the same level of operating profit. It also shows that on average spread to total assets ratio is 6.01% and 2.13 % and for the banks in Nagpur and Pune region respectively. Further, it shows an average zero percentage return on assets for all the banks in both the regions, which is not a good sign. And an average Interest income to Total Income is 94% and 93% of Nagpur and Pune region respectively

**Table 6**

Region Nagpur = 1 And Pune = 2	Liquid Assets To Total Assets From 2012-13 To 2016-17	G-Sec. To Total Assets From 2012-13 To 2016-17	Liquid Assets To Demand Deposits From 2012-13 To 2016-17	Liquid Assets To Total Deposits From 2012-13 To 2016-17
1	0.18	0.13	0.88	0.30
1	0.17	0.16	0.88	0.27
1	0.15	0.15	0.81	0.24
1	0.21	0.15	1.02	0.32
1	0.25	0.14	1.18	0.39
1	0.17	0.23	0.70	0.21
1	0.16	0.23	0.78	0.20
1	0.17	0.24	0.86	0.21
1	0.20	0.22	0.95	0.24
1	0.26	0.22	1.00	0.31
1	0.15	0.23	0.71	0.17
1	0.10	0.25	0.56	0.11
1	0.15	0.20	0.90	0.16
1	0.18	0.18	0.90	0.20
1	0.20	0.18	1.00	0.22
1	0.23	0.20	1.43	0.26
1	0.20	0.24	1.21	0.23
1	0.19	0.25	1.19	0.22
1	0.22	0.25	1.40	0.26

1	0.19	0.26	1.09	0.22
Mean For 1	0.1865	0.2055	0.97250	0.237
S.D. For 1	0.04	0.04	0.23	0.06
Rank	2	2	1	2
2	0.23	0.21	1.08	0.26
2	0.20	0.21	1.04	0.24
2	0.19	0.27	1.00	0.22
2	0.19	0.24	0.97	0.21
2	0.19	0.32	0.91	0.22
2	0.16	0.22	0.42	0.20
2	0.18	0.21	0.48	0.23
2	0.20	0.20	0.54	0.25
2	0.21	0.19	0.58	0.26
2	0.25	0.22	0.65	0.31
2	0.29	0.21	1.21	0.36
2	0.31	0.22	1.38	0.38
2	0.21	0.27	1.03	0.26
2	0.19	0.30	0.93	0.23
2	0.13	0.38	0.58	0.15
2	0.19	0.21	0.83	0.25
2	0.20	0.19	0.90	0.25
2	0.21	0.17	1	0.28
2	0.20	0.17	1	0.26
2	0.22	0.18	1	0.29
Mean For 2	0.2075	0.2295	0.87650	0.256
S.D. For 2	0.04	0.05	0.26	0.05
Rank	1	1	2	1
t test P value	0.095197869	0.123497881	0.216264502	0.314562112

Ho16 There is no significant difference between the Liquid Assets To Total Assets ratio among two regions of the selected banks during the study. [ **p-value** =0.095197869 **therefore Null Hypothesis Accepted** ]

Ho17 There is no significant difference between the G-Sec. To Total Asset ratio among two regions of the selected banks during the study. [ **p-value** =0.123497881 **therefore Null Hypothesis Accepted** ]

Ho18 There is no significant difference between Liquid Assets to Demand Deposits ratio among two regions of the selected banks during the study. [ **p-value** =0.216264502 **therefore Null Hypothesis Accepted** ]

Ho19 There is no significant difference between Liquid Assets to Total Deposits ratio among two regions of the selected banks during the study. [ **p-value** =0.314562112 **therefore Null Hypothesis Accepted** ]

### Analysis

Table 6 shows on average the overall liquidity of the banks is 19 % and 21% of the Nagpur and Pune regions respectively. It also shows that an average investment in government securities is 21 % and 23% for Nagpur and Pune regions respectively. Further, it shows that on average the ability of the banks to fulfill the demand is 97% and 88% of the Nagpur and Pune regions respectively. And the average liquidity position of total deposits is 24% and 26% for Nagpur region and Pune regions respectively.

### FINDINGS AND SUGGESTIONS

- All the banks in both regions have maintained a very much satisfactory level of CRAR. (Because as per RBI norms it should be 9%) Hence, care should be taken to maintain at least the same CRAR

- For all the banks in both the regions, there is no burden of outside long-term liabilities. Hence, if required, they can opt for debt to a certain extent.
- For advances, in case of all the banks in both the regions instead of an aggressive policy, they can follow a liberal policy to a certain extent.
- The position of the NPA is very much satisfactory for all the banks in the Pune region. And in the case of Nagpur region, NPA of 9% is not very much bad. But attempts should be made to reduce the same.
- All the banks in both regions should make deliberate efforts for converting the deposits into advances.
- All the banks in both regions should see to it how they can improve upon business per employee.
- All the banks in both the regions show, on average, only 2 % profit per employee which is not satisfactory. Hence, attempts should be made by all the banks to increase the profit per employee.
- On average, only 1% operating profit of all the banks in both regions is very much unsatisfactory, which should be improved.
- The interest expenses of all the banks in both regions are more than the interest income, which indicates the high costs of deposits, which should be reduced.
- For all the banks in both the regions, there is a good backing for the demand depositors in the form of liquid assets.

## CONCLUSIONS

Based on the ratios, CAMEL Model and ranking, and following tables, the conclusions can be drawn as under.

**Table 7: Capital Adequacy Ratios**

RATIOS	RANKING OF REGIONS BASED ON RATIOS	
	Nagpur	Pune
CRAR	2	1
Debt - Equity Ratio	2	1
Advances To Total Assets	1	2
Government Securities to Total Investments	2	1
MEAN	1.75	1.25
RANK	2	1

As far as CRAR is concerned banks in Pune region have better performance compared to banks in the Nagpur region.

**Table 8: Asset Quality Ratio**

RATIOS	RANKING OF REGIONS BASED ON RATIOS	
	Nagpur	Pune
Gross NPA To Net Advances	2	1
Net NPA To Net Advances	2	1
Total Investment To Total Assets	1	2
Net NPA To Total Assets	2	1
MEAN	1.75	1.25
RANK	2	1

As far as Asset quality is concerned banks in Pune region stand first.

**Table 9: Management Efficiency Ratios**

RATIOS	RANKING OF REGIONS BASED ON RATIOS	
	Nagpur	Pune
Total Advances To Total Deposits	1	2
Business Per Employee	2	1
Profit Per Employee	2	1
MEAN	1.67	1.33
RANK	2	1

As far as ratios under Management Efficiency is concerned, banks in Pune region stand first.

**Table 10: Earning Ratios**

RATIOS	RANKING OF REGIONS BASED ON RATIOS	
	Nagpur	Pune
Operating Profit To Working Fund	2	1
Spread To Total Assets	1	2
Net Profit to Average Assets	1	2
Interest Income to Total Income	1	2
MEAN	1.25	1.75
RANK	1	2

As far as Earning ratios are considered banks in Nagpur region stand first

**Table 11: Liquidity Ratios**

RATIOS	RANKING OF REGIONS BASED ON RATIOS	
	Nagpur	Pune
Liquid Assets To Total Assets	2	1
G-Sec. To Total Asset	2	1
Liquid Asset to Demand Deposit	1	2
Liquid Assets to Total Deposits	2	1
MEAN	1.75	1.25
RANK	2	1

As far as liquidity ratios are concerned, banks in the Pune region stand first.

**Table 12: Overall Ranking**

OVERALL PERFORMANCE RATIOS	RANKING	
	Nagpur	Pune
Capital Adequacy Ratio	2	1
Asset Quality Ratio	2	1
Management Efficiency Ratio	2	1
Earning Ratios	1	2
Liquidity Ratios	2	1
MEAN	1.80	1.20
RANK	2	1

Finally, it can be concluded that as far as overall performance is concerned, banks in the Pune region are performing better compared to banks in the Nagpur region...

Further, it can be concluded that the ratios which are responsible for bringing down the performance of Nagpur region are CRAR, Debt-Equity, Government Securities To Total Investment, Gross NPA to Net Advances, Net NPA to Net Advances, Net NPA to Total Assets, Business Per Employee, Profit Per Employee, Operating Profit to Working Fund, Liquid Assets to Total Assets, G-Sec. Total Assets and Liquid Assets to Total Deposits. Therefore, the Nagpur region should improve upon these ratios.



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