



FINANCIAL PERFORMANCE EVALUATION OF SELECTED SMALL FINANCE BANKS IN INDIA: A CAMEL MODEL APPROACH

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Abstract

It is necessary to examine the financial performance of banks on a regular basis in order to determine their financial strengths and eliminate possible weaknesses in order to maintain a stable financial system. Banks serve as the engine that keeps a country's financial system working smoothly and efficiently. The present research study sought to investigate and assess the financial, functional, and management health of small finance banks in India. To achieve the objectives of the research study, audited financial data of small finance banks was obtained from the banks' websites and RBI statistics for the period from 2016-17 to 2019-20 and analysed with CAMEL's parameters and sub-parameters. Furthermore, the Anova test was used to statistically determine if there was mean variation in the results of sub parameters of these banks. The findings of the study showed that small finance banks performed satisfactorily during the study period. However, Capital small finance bank was ranked first, followed by Equitas and AU small finance banks, and Ujjivan small finance bank secured the last rank as per CAMEL parameters. Fortunately, the analysis found no significant differences in terms of performance of sub-parameters of CAMEL such as NNPA ratio, II to TA ratio, RoA, OP to TA, CD ratio, and Gsec to TA ratio among these banks. The research study concluded that the competition between these banks was intense in capital and management parameters.

Key Words: CAMEL, financial performance, small finance banks

Introduction

The development and growth of the economy largely rely on healthy financial institutions. For some years, Indian economic growth has been largely sustained by the strong support from the banking sector. The Indian industry depends heavily on the growth of the Indian banking sector, especially for retail and financial inclusion activities. A bank is a financial organisation that offers financial services to its customers. The Reserve Bank of India (RBI) is our country's controlling body for all aspects of the banking industry. In the past few years, there have been many developments in the financial services industry, and one of the most recent is the idea of small finance banks. Small finance banks were granted licences in 2016 with the aim of promoting access to financial services by focusing on basic business transactions such as deposit acceptance and lending to rural, small and marginal entrepreneurs as well as farmers through low-cost and high-tech operations. Small finance banks can carry out basic banking functions such as accepting all types of deposits and granting advances to unbanked areas. Small finance banks must adhere to all of the same rules and regulations as commercial banks, such as the requirement to maintain a CRR and a SLR. Small finance banks are expected to lend 75% of their funds to priority sectors, with 50% of their loan portfolio made up of loans and advances of up to Rs. 25 lakhs. SFBs provide low-cost banking services to their customers. Commercial banks have difficulty opening up branches in every village, and SFB's provide every person with a low-cost banking platform in villages also. Every person has access to a low-cost banking platform through SFBs. SFBs pay higher interest rates on savings and lower interest rates on advances. This will support low-income individuals and small businesses. In order to effectively, appropriately, productively, and sustainably address the uncertainty and mixture of risk exposure to the banking system, an examination of the overall profitability of SFBs and their determinants is very important. A SFBs assessment generally focuses on its assets, capital, liabilities, and deposits. Furthermore, the ranking status of SFBs has piqued the interest of scholars, top management, investors, and governments.

Review of Literature

(Dr. Srinivasan & Saminathan, 2016) evaluated the financial performance of 25 public sector, 18 private sector, and 8 foreign sector banks from 2012 to 2014 using the CAMEL rating system and Anova test as statistical tools, and concluded that banks with low rankings must improve their financial performance to compete with top-ranked banks. Their research also concluded that banks with the lowest ranking should strengthen their efficiency in order to achieve the desired expectations. Williams (2011) used an error correction analysis to evaluate capital adequacy tendencies and found that CAR can be increased by paying more attention to a country's macroeconomic factors. Jain et al. (2019) investigated the impact of determinants on the profitability of 45 commercial banks in India from 2010 to 2016 using a random effect model. Their research found that bank-specific predictor variables such as management, assets, earnings, and liquidity can describe a significant portion of the profitability in Indian commercial banks and that banks should focus on investing funds in more profitable instruments while keeping total

asset investments low. Their findings indicated that private-sector banks outperformed public-sector banks. (Verma, 1996) looked into the profitability of commercial banks and discovered that it has been declining since 1969 and that they are operating more effectively than foreign banks. (Srivastava, 2000). focused on ramping up the digitalization of bank branches in order to improve profitability, operational performance, service quality, and diversify the revenue base. (Ravikumar, 2019) analysed small finance banks and financial inclusion in India to evaluate the functional framework and financial performance of SFBs and found that SFBs must embrace new innovations in their retail banking operations and in the access to financial services of their customers in order to ensure their long-term viability.

Objectives of the Study

- To evaluate the financial and managerial health of selected SFBs.
- To rank selected SFBs of India based on CAMEL model.
- To make recommendations for improving the efficiency of selected SFBs in India by using CAMEL Model.
- To examine the relationship between the profitability of selected SFBs and the variables.

Methodology

The present study investigates the financial and operational performance of selected SFBs in India using the CAMEL model. The sample involves the top five SFBs, namely: AU Small Finance Bank, Capital Small Finance Bank, Equitas Small Finance Bank, Suryoday Small Finance Bank, and Ujjivan Small Finance Bank. The analysis was based on secondary data of SFBs and was collected from annual reports published by banks as well as statistics published by the RBI from 2016-17 to 2019-20. Furthermore, in order to reach a definitive conclusion, we checked the hypothesis of each result ratio of the CAMEL model at a 5% significant level by using the one-way Anova test.

Hypotheses of the Study

(H₀) There is no significant difference among the performance of AU, Capital, Equitas, Suryoday and Ujjivan Small Finance Banks in terms of

- 1) Capital Adequacy - CAR and E/TA ratios
- 2) Assets Quality – GNPA, NNPA and GNPA/TA ratios.
- 3) Management Efficiency – PPE, BPE and II/TA ratios.
- 4) Earning Capacity – ROA, ROE and OP/TA ratios.
- 5) Liquidity Position – C/TA, C/D and Gsec/TA ratios.

CAMEL Model

Capital Adequacy (C) : Capital adequacy parameters in this research study included two ratios: capital adequacy (CAR) and equity to total assets ratio (E/TA). Banks must maintain a minimum rate of capital adequacy in accordance with banking regulations and calculated by $\text{Tier 1 capital} + \text{Tier 2 capital} / \text{RWA}$, and the equity to total assets ratio is calculated by $\text{equity} / \text{total assets}$ of the bank.

Assets Quality (A): One of the key reasons for the poor profitability in the banking sector is the high rate of nonperforming loans. In this research study, gross NPA (GNPA), net NPA (NNPA), and gross NPA to total assets (GNPA/TA) ratios were used.

Management Efficiency (M): One of the most significant factors for healthy financial performance in the banking sector is good and efficient management and their decisions. In this study, management parameters include three ratios, namely profit per employee (PPE), business per employee (BPE), and interest income to total advances (II/TD).

Earning Capacity (E): The earning parameter is important because it allows a bank to increase its assets by maintaining a high rate of profitability and it also supports present and future operations of the bank. In this study, return on assets (ROA), return on equity (ROE), and operating profits to total assets (OP/TA) were used.

Liquidity (L): The soundness of a bank's liquidity position is vital to avoiding liquidity difficulties in a bank. In this study, liquidity parameters included cash to total assets (C/TA), cash to deposits (C/D) and government securities to total assets (Gsec/TA) ratios.

Result and Analysis

1. Capital Adequacy - C

The most commonly used indicator of a bank's soundness is the capital adequacy ratio. It represents the bank's ability to absorb disruptions in the moment of negative events. The concept of "capital adequacy" refers to the ability of the bank to sustain potential losses. It is needed to retain depositors' trust and prevent the bank from going bankrupt. Table 1 reflects the results of the CAR of SFBs for the last four years. The highest average of CAR was secured by Suryoday Bank (39.04), followed by Equitas (27.80), Ujjivan (22.26), AU (20.91) and Capital (19.53). Suryoday bank had the highest, at 53.62%, indicating that the bank has not fully utilised its resources and is cautious in nature. In this research study, capital parameters also include an E/TA ratio measuring solvency that is calculated using a bank balance sheet. Table 2 provides the result of the E/TA ratio of SFBs for the research period. In this ratio, Ujjivan bank (14.79) secured first rank, followed by Equitas (7.57), Suryoday (2.72), AU (1.51) and capital (0.78).

Table 3 reveals the result of the rank of capital parameters. From the average result of individual rank of SFCs obtained in CAR and E/TA ratio, Equitas, Suryoday, and Ujjivan banks secured first rank, whereas AU and capital SFBs secured fourth and fifth rank, respectively.

Table 1: Capital Adequacy Ratio (CAR)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	21.99	19.11	23.61	29.57	28.81
2019	19.31	16.40	22.44	35.03	18.94
2018	19.31	19.66	29.63	37.94	23.04
2017	23.04	22.95	35.51	53.62	18.24
Avg.	20.91	19.53	27.80	39.04	22.26
Rank	4	5	2	1	3

Table 2: Equity to Total Assets Ratio (E/TA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	0.72	0.63	5.45	1.61	10.47
2019	0.90	0.66	6.38	2.17	11.93
2018	1.52	0.85	7.56	3.12	17.31
2017	2.91	0.99	10.88	3.99	19.44
Avg.	1.51	0.78	7.57	2.72	14.79
Rank	4	5	2	3	1

Table 3: Calculation of Group Rank

Ratios	AU	Capital	Equitas	Suryoday	Ujjivan
CAR	4	5	2	1	3
E/TA	4	5	2	3	1
Avg.	4.00	5.00	2.00	2.00	2.00
Rank	4	5	1	1	1

Table 4: Result of ANOVA Test

Particulars	SS	df	MS	F	P-value	F crit
CAR						
Between Groups	1019.919	4	254.980	7.192	0.0019	3.056
Within Groups	531.830	15	35.455			
Total	1551.748	19				
E/TA						
Between Groups	545.820	4	136.455	26.247	0.0000	3.056
Within Groups	77.983	15	5.199			
Total	623.803	19				

Table 4 reveals the result of hypothesis testing of capital sub-parameters. There is a significant difference between the results of the CAR of selected SFBs at a 5% significant level. The p value is less than 0.05 and the F value is 3.056, so the null hypothesis is rejected. There is also a significant difference between the results of E/TA and selected SFBs as the p value is 0.0000 and the F value is 3.056 at a 5% significant level, so the null hypothesis is rejected.

2. Assets Quality – A

Table 5 provides the results of the GNPA ratio of selected SFBs. Presently, most banks in India are facing a critical problem of having a high GNPA ratio. The government also provides a large amount of funds to the bank in order to reduce the GNPA ratio. result of GNPA indicates good for the financial performance of banks, whereas the higher ratio indicates a bank suffering from critical problems of GNPA and indicates bad for the bank's financial performance. Capital (1.31%) SFBs had the lowest average result of GNPA and secured the first rank, followed by Ujjivan (1.46%), AU (1.88%) and Equitas (2.89%). Suryoday Bank secured the last position and has a 3.57% GNPA ratio. Table 6 provides the results of the NNPA of selected SFBs during the research period. The NNPA of banks is calculated after providing a provision on the gross loans. The lowest NNPA result indicates a positive for banks, while the highest result indicates a negative for banks. According to the result, Ujjivan bank (0.30%) secured the first rank, followed by Capital (0.94%), AU (1.15%) and Equitas (1.52) for second, third, and fourth place, respectively, in the NNPA parameter. Suryoday bank has the highest average result of NNPA, which is 1.77%, and secured the last rank. Table 7 reveals the result of the GNPA to TA ratio of selected SFBs. The lower average result of GNPA to TA ratio indicates that banks are doing well. Capital Bank has the lowest result, which is 0.76%, and secured the first rank, followed by Ujjivan 1.14%, AU 1.31%, and Equitas 1.97%. Suryoday bank has 2.25%, which is the highest among the selected SFBs and secured the last rank in the GNPA to TA parameter. Table 8 reveals the result of the group rank of assets parameter of the CAMEL model. According to the result, Capital Bank secured the first rank, followed by Ujjivan, second, AU, third, Equitas, fourth, and Suryoday Bank, fifth, all secured in asset parameters.

Table 5: Gross Non-performing Assets Ratio (GNPA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	1.70	1.77	2.72	2.79	0.97
2019	2.00	1.31	2.53	1.80	0.92
2018	2.00	1.14	2.73	3.54	3.65
2017	1.80	1.02	3.56	6.15	0.28
Avg.	1.88	1.31	2.89	3.57	1.46
Rank	3	1	4	5	2

Table 6: Net Non-performing Assets Ratio (NNPA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	0.81	1.25	1.66	0.57	0.20
2019	1.29	0.93	1.44	0.44	0.26
2018	1.27	0.84	1.46	2.25	0.69
2017	1.22	0.72	1.51	3.80	0.03
Avg.	1.15	0.94	1.52	1.77	0.30
Rank	3	2	4	5	1

Table 7: Gross Non-performing Assets to Total Assets Ratio (GNPA/TA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	1.09	1.10	2.16	1.89	0.74
2019	1.44	0.79	1.88	1.32	0.71
2018	1.43	0.63	1.60	2.61	2.91
2017	1.27	0.51	2.23	3.19	0.19
Avg.	1.31	0.76	1.97	2.25	1.14
Rank	3	1	4	5	2

Table 8: Calculation of Group Rank

Ratios	AU	Capital	Equitas	Suryoday	Ujjivan
GNPA	3	1	4	5	2
NNPA	3	2	4	5	1
GNPA/TA	3	1	4	5	2
Avg.	3.00	1.33	4.00	5.00	1.67
Rank	3	1	4	5	2

Table 9: Result of ANOVA Test

Particulars	SS	df	MS	F	P-value	F crit
GNPA						
Between Groups	15.188	4	3.797	3.139	0.0461	3.056
Within Groups	18.144	15	1.210			
Total	33.332	19				
NNPA						
Between Groups	5.156	4	1.289	2.377	0.0985	3.056
Within Groups	8.135	15	0.542			
Total	13.291	19				
GNPA/TA						
Between Groups	6.015	4	1.504	3.258	0.0412	3.056
Within Groups	6.923	15	0.462			
Total	12.939	19				

Table 9 provides the results of the hypothesis of GNPA, NNPA, and GNPA to TA ratios. There is a significant difference in terms of GNPA and GNPA to TA ratios of selected SFBs at a 5% significant level. The null hypothesis is rejected as the p value is less than 0.05. There is no significant difference in terms of NNPA of selected SFBs at a 5% significant level as the p value is greater than 0.05, hence the null hypothesis is accepted.

3. Management Efficiency - M

Management capability efficiency is typically qualitative and can be understood by subjective assessment of management processes, organisational culture, and control systems of banks. Table 10 describes the results of the PPE of selected SFBs. Capital Bank secured first place as the average result of PPE was 3.08 lacs per employee, followed by AU 3.01, Suryoday 1.75, and Equitas 1.08 lacs per employee. Ujjivan bank secured the last rank because the PPE was 0.93 lakh per employee. Table 11 reveals the results of the BPE of selected SFBs. Capital Bank (480.37) secured the first position, followed by AU bank (179.20), Equitas bank (103.25) and Ujjivan bank (94.40). Suryoday Bank (88.00) secured the last rank in terms of

BPE. Table 12 describes the result of the II to TD ratio of selected SFBs. According to the result, Suryoday Bank (22.36%) secured the first rank, followed by Equitas (18.67%), AU (15.40%), and Ujjivan (15.08%) for the second, third, and fourth positions, respectively, in the NNPA parameter. Capital Bank has the lowest average result of II/TD ratio, 14.56%, and is ranked last. Table 13 reveals the result of the group rank of management parameters of the CAMEL model. According to the result, Capital bank and AU bank secured the first and second places, followed by Equitas and Suryoday bank in third. Ujjivan bank secured the fifth rank in terms of management parameters.

Table 10: Profit per Employee (PPE) in lacs

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	5.00	3.33	1.60	3.00	2.15
2019	3.00	2.60	1.50	3.00	1.53
2018	3.00	3.40	0.20	0.00	0.06
2017	1.02	3.00	1.00	1.00	0.00
Avg.	3.01	3.08	1.08	1.75	0.93
Rank	2	1	4	3	5

Table 11: Business per Employee (BPE) in lacs.

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	300.00	484.24	135.00	123.00	125.64
2019	234.00	472.19	132.00	109.00	113.44
2018	110.00	482.63	89.00	77.00	79.37
2017	72.78	482.41	57.00	43.00	59.14
Avg.	179.20	480.37	103.25	88.00	94.40
Rank	2	1	3	5	4

Table 12: Interest Income to Total Advances (II/TD)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	15.88	13.85	19.24	21.71	19.25
2019	12.92	13.32	18.21	19.78	17.36
2018	13.28	14.67	20.02	18.22	20.01
2017	19.54	16.38	17.21	29.73	3.70
Avg.	15.40	14.56	18.67	22.36	15.08
Rank	3	5	2	1	4

Table 13: Calculation of Group Rank

Ratios	AU	Capital	Equitas	Suryoday	Ujjivan
PPE	2	1	4	3	5
BPE	2	1	3	5	4
II/TD	3	5	2	1	4
Avg.	2.33	2.33	3.00	3.00	4.33
Rank	1	1	3	3	5

Table 14: Result of ANOVA Test

Particulars	SS	df	MS	F	P-value	F crit
<u>PPE</u>						
Between Groups	16.924	4	4.231	3.211	0.0431	3.056
Within Groups	19.763	15	1.318			
Total	36.687	19				
<u>BPE</u>						
Between Groups	445979.379	4	111494.845	37.501	0.0000	3.056
Within Groups	44597.072	15	2973.138			
Total	490576.452	19				
<u>II/TD</u>						
Between Groups	173.970	4	43.492	2.228	0.1149	3.056
Within Groups	292.832	15	19.522			
Total	466.802	19				

The result of the hypothesis testing in terms of PPE, BPE, and II/TD is shown in table 14. According to the result of hypothesis testing through the Anova test, there is a significant relationship between the results of selected SFBs in terms of PPE and BPE as the p value is less than 0.05 at a 95% confidence level. Hence, the null hypothesis is rejected as the p values are 0.043 and 0.0000, respectively. The null hypothesis is accepted in terms of II/TD as the p value is greater than 0.05, which is 0.1149 of the selected SFBs, indicating there is no significant relationship amongst the selected SFBs in terms of II/TD ratio.

4. Assets Quality – A

The earnings of a bank represent the financial position, development, liquidity, and profitability capacity of a bank. Table 15 shows the results of the RoA of selected SFBs. The highest average result of ROA was secured by AU bank (2.01%), followed by Suryoday (1.81%), Equitas (1.10%), Ujjivan (1.04%) and Capital (0.57%). Table 16 reveals the results of the RoE of selected SFBs for the period of 2017 to 2020. According to the result, AU bank (16.27%) secured the first rank, followed by Capital bank (8.16%), Suryoday bank (7.44%), and Equitas bank (6.57%). Ujjivan bank (6.47%) secured the last rank in terms of RoE. Table 17 provides the result of the OP/TA ratio of selected SFBs. Suryoday bank (4.65%) secured the first rank, followed by AU bank (3.72%), Equitas bank (2.77%) and Ujjivan bank (2.50%). Capital Bank (0.98%) secured the last rank in terms of RoE. Table 18 reveals the result of the group rank of the asset quality parameter of the CAMEL model. According to the result, AU bank secured the first rank, followed by Suryoday bank in second, Equitas bank in third, and Capital Bank in fourth place. Ujjivan bank secured the fifth position in terms of asset quality parameters.

Table 15: Return on Assets (ROA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	1.81	0.51	1.38	2.49	2.21
2019	1.48	0.51	1.43	3.00	1.88
2018	2.04	0.63	0.30	0.58	0.08
2017	2.70	0.62	1.28	1.17	0.00
Avg.	2.01	0.57	1.10	1.81	1.04
Rank	1	5	3	2	4

Table 16: Return on Equity (ROE)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	17.90	7.73	9.75	11.40	13.98
2019	14.03	8.02	9.80	12.19	11.49
2018	12.80	8.98	1.57	1.88	0.42
2017	20.36	7.91	5.18	4.30	0.00
Avg.	16.27	8.16	6.57	7.44	6.47
Rank	1	2	4	3	5

Table 17: Operating Profit to Total Assets (OP/TA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	3.20	1.08	3.41	6.70	3.96
2019	2.81	0.89	2.93	7.16	2.66
2018	3.06	1.08	1.96	3.25	3.37
2017	5.83	0.85	2.79	1.49	0.01
Avg.	3.72	0.98	2.77	4.65	2.50
Rank	2	5	3	1	4

Table 18: Calculation of Group Rank

Ratios	AU	Capital	Equitas	Suryoday	Ujjivan
ROA	1	5	3	2	4
ROE	1	2	4	3	5
OP/TA	2	5	3	1	4
Avg.	1.33	4.00	3.33	2.00	4.33
Rank	1	4	3	2	5

The result of the hypothesis testing in terms of RoA, RoE, and OP/TA is shown in table 19. According to the result of hypothesis testing through the Anova test, there is a significant relationship between the results of selected SFBs in terms of RoE as the p value is less than 0.05 at a 95% confidence level. Hence, the null hypothesis is rejected as the p value is 0.0452. The null hypothesis is accepted in terms of RoA and OP/TA as the p value is greater than 0.05, which is 0.1176 and 0.553, respectively, indicating there is no significant relationship amongst the selected SFBs in terms of RoA and OP/TA ratio.

Table 19: Result of ANOVA Test

<i>Particulars</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
<u>ROA</u>						
Between Groups	5.618	4	1.404	2.206	0.1176	3.056
Within Groups	9.550	15	0.637			
Total	15.167	19				
<u>ROE</u>						
Between Groups	273.207	4	68.302	3.162	0.0452	3.056
Within Groups	324.002	15	21.600			
Total	597.209	19				
<u>OP/TA</u>						
Between Groups	30.483	4	7.621	2.952	0.0553	3.056
Within Groups	38.728	15	2.582			
Total	69.211	19				

5. Liquidity – L

Bank liquidity refers to a bank's capacity to satisfy its financial responsibilities when needed. Table 20 gives the result of the C/TA ratio of selected SFBs. According to the results, Capital Bank (1.19%) came in first place, followed by Equitas Bank (0.76%), Ujjivan Bank (0.65%), AU Bank (0.44%), and Suryoday Bank (0.12%), in that order, in terms of the C/TA parameter. Table 21 reveals the result of the C/D ratio of selected SFBs. Ujjivan bank (37.61%) obtained the first rank, whereas AU bank (3.60%) obtained the fifth rank. Table 22 gives the result of the Gsec/TA ratio. As per the results, Capital Bank (23.53%) got the first rank, whereas AU Bank (12.49%) got the fifth rank. Table 23 reveals the result of the group rank of the liquidity parameter of the CAMEL model. According to the result, Capital Bank secured the first rank, followed by Equitas bank, second, Ujjivan bank, third and Suryoday bank, fourth. AU bank secured fifth place in terms of asset quality parameters.

Table 20: Cash to Total Assets (C/TA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	0.77	1.14	0.72	0.12	1.08
2019	0.36	1.00	0.74	0.14	0.65
2018	0.49	0.93	0.87	0.15	0.40
2017	0.14	1.68	0.72	0.09	0.48
Avg.	0.44	1.19	0.76	0.12	0.65
Rank	4	1	2	5	3

Table 21: Credit to Deposits Ratio (C/D)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	4.01	4.98	3.53	2.12	11.36
2019	4.18	5.86	4.47	3.03	6.05
2018	6.21	5.41	6.89	4.11	6.62
2017	0.00	6.40	12.90	120.87	126.41
Avg.	3.60	5.66	6.95	32.53	37.61
Rank	5	4	3	2	1

Table 22: Government Securities to Total Assets (Gsec/TA)

Year	AU	Capital	Equitas	Suryoday	Ujjivan
2020	18.14	19.74	11.87	12.77	13.01
2019	14.89	19.89	14.24	12.39	11.11
2018	11.89	25.86	21.34	13.26	13.01
2017	5.03	28.62	19.69	28.70	17.15
Avg.	12.49	23.53	16.78	16.78	13.57
Rank	5	1	2	3	4

Table 23: Calculation of Group Rank

Ratios	AU	Capital	Equitas	Suryoday	Ujjivan
C/TA	4	1	2	5	3
C/D	5	4	3	2	1
Gsec/TA	5	1	2	3	4
Avg.	4.67	2.00	2.33	3.33	2.67
Rank	5	1	2	4	3

Table 24 provides the result of the hypothesis of C/TA, C/D, and Gsec/TA ratios. There is a significant difference in terms of the C/TA ratio of selected SFBs at a 5% significant level. The null hypothesis is rejected as the p value is less than 0.05, which is 0.0002. There is no significant difference in terms of C/D and Gsec/TA ratios of selected SFBs at a 5% significant level as the p value is greater than 0.05, hence null hypotheses are accepted.

Table 24: Result of ANOVA Test

Particulars	SS	df	MS	F	P-value	F crit
<u>C/TA</u>						
Between Groups	2.491	4	0.623	10.936	0.0002	3.056
Within Groups	0.854	15	0.057			
Total	3.345	19				
<u>C/D</u>						
Between Groups	4299.530	4	1074.882	0.767	0.5629	3.056
Within Groups	21011.851	15	1400.790			
Total	25311.381	19				
<u>Gsec/TA</u>						
Between Groups	296.482	4	74.120	2.637	0.0755	3.056
Within Groups	421.589	15	28.106			
Total	718.071	19				

Table 25 reveals the overall result of the CAMEL model. Capital Small Finance Bank is ranked first, indicating exceptional financial performance. Capital Bank secured first place in assets, management, and liquidity parameters, whereas fourth place in earning parameters and fifth place in capital parameters. Equitas Bank secured second place in overall results, indicating better than average financial performance. AU small finance bank secured third place in the overall performance of the CAMEL model, indicating average financial performance. Suryoday small finance bank secured a fourth place ranking, below average financial performance. Ujjivan Small Finance Bank secured fifth place, indicating a well-run bank and a need to improve its performance in management and earning parameters.

Table 25: Result of CAMEL Model

Parameters	AU	Capital	Equitas	Suryoday	Ujjivan
C	4	5	1	1	1
A	3	1	4	5	2
M	1	1	3	3	5
E	1	4	3	2	5
L	5	1	2	4	3
Average	2.80	2.40	2.60	3.00	3.20
Rank	3	1	2	4	5

Limitations of the study and Scope

This study was restricted to only five small finance banks from the Indian banking sector and was conducted over a four-year period from 2017 to 2020. This research analysis was focused on secondary data from a selected small finance bank; no primary or macroeconomic data were used in this study. Only earnings, assets, growth, liquidity, and equity parameters were considered in this study; no policy, management, or sensitivity to market risk parameters were taken into account. Since only a few small finance banks were chosen for this analysis, any conclusions and recommendations cannot be generalised to all banks. Individuals, bank customers, shareholders, traders, policymakers, regulators, governments, central banks, and potential researchers are all expected to benefit from this research report. Further research can be conducted with all of India's small finance banks using internal and external variables such as GDP, inflation, foreign exchange rate, and interest rate changes, among others.

Conclusion

Based on the findings, we conclude that financial variables like earnings, assets, growth, liquidity, and equity can be very important to the profitability of small finance banks. From the above results, Capital Small Finance Bank secured first rank in assets, management, and liquidity parameters with outstanding performance and secured fourth rank in earning parameters because of low profitability. Equitas bank secured second place in overall results and secured first place in only capital parameters. AU

Small Finance Bank was also ranked first in management and earnings with superior performance, and third overall in CAMEL parameters. Suryoday bank secured the fourth rank in the overall result, whereas Ujjivan bank secured the last position in the overall result. In capital parameters, Ujjivan bank got the first rank, whereas in management and earning parameters, the bank got the fifth rank. Ujjivan Bank should pay attention to management and earning parameters to improve their profitability. The research study concluded that the competition between these banks was intense in capital and management parameters. All the selected small finance banks have maintained the capital adequacy ratio as per RBI norms. Fortunately, the analysis found no significant differences in terms of performance of sub-parameters of CAMEL such as NNPA ratio, II to TA ratio, RoA, OP to TA, CD ratio, and Gsec to TA ratio among these banks. Finally, this research study concludes that small finance banks in India, which are selected on the basis of market capitalization, had an acceptable performance according to CAMEL parameters.

References

- Annapurna, V., & Manchala, G. (2017). Balanced Scorecard Evaluation of the Performance of Indian Public Sector Banks. *Indian Journal of Finance* , 7-21.
- Ansari, M. S. (2008). *Performance evaluation of nationalised commercial banks in India through camels model in the post liberalisation era*. The Thesis submitted to Bundelkhand University.
- Baidoo, W. T., Amankwah, S., & Tobazza, S. (2014). The Use of CAMELS Model to Evaluate Banks, a Case Study of Seven Banks in Ghana. *International Conference on Applied Sciences and Technology International Conference on Applied Sciences and Technology* , 1-13.
- Bhiryani, H. (2017). *Performance analysis through camel rating A Comparative Study of Selected Public and Private Sector Banks In India*. The Thesis submitted to Jiwaji University.
- Budhedeo, S., & Pandya, N. (2018). Financial Performance of Public Sector Banks in India: A Post Reform Analysis. *Indian Journal of Finance* , 7-20.
- Dr.Srinivasan, & Saminathan, Y. P. (2016). A Camel Model Analysis of Public, Private and Foreign Sector Banks in India. *Pacific Business Review International* , 8 (9), 45-57.
- Ebrahimi, S. K., Bahraminasab, A., & Fard, M. Y. (2017). Performance Assessment of Banks listed on Tehran Stock Exchange based on CAMEL Indicators. *International Journal of Economics and Financial Issues* , 7 (5), 128-136.
- Gadhiya, N. M. (2015). *The Study of Financial Performance of selected Public and Private sector banks in India with reference to CAMEL model*. The thesis submitted to Saurashtra University.
- Gondesi, S. K. (2016). *Evaluating financial performance of select public and private sector banks using camels and eagles models*. The Thesis submitted to GITAM University.

- Jain, R. K., Bhimaraya, M., & K.P., V. r. (2019). Determinants of Profitability of Indian Commercial Banks. *Indian Journal of Finance* , 13 (1), 8-19.
- Jain, R., Metri, B., & Rao, K. V. (2019). Determinants of Profitability of Indian Commercial Banks. *Indian Journal of Finance* , 8-19.
- Kumar, A. P. (2013). *A Comparative Performance Analysis of Banking Sector with Special Reference to Camel Model*. The Thesis submitted to Dr. Rammanohar Lohia Avadh University, Faizabad.
- Palamalai, S., & Saminathan, Y. (2016). A CAMEL model analysis of public, private and foreign sector banks in India. *Pacific Business Review International*, 8(9), 45-57.
- Ravikumar, T. (2019). *Small Finance Banks and Financial Inclusion in India*. 3085(03), 2018 2020.
- Roger Antoun, A. C. (2018). Determinants of financial performance of banks in Central and Eastern Europe. *Business and Economic Horizons* , 513-529.
- S. Santoshkumar, B. C. (2018). Determinant of Capital Structure: An Exclusive Study of Passenger Car Companies in India. *Indian Journal of Finance* , 43-53.
- Sahota, S., & Babli, D. (2017). Relative performance Analysis of Scheduled Commercial Banks in India: A CAMEL Model Approach. *Indian Journal of Finance* , 40-57.
- Sahota, S., & Dhiman, B. (2017). Relative Performance Analysis of scheduled Commercial banks in India: A CAMEL Model Approach. *Indian Journal of Finance* , 40-57.
- Sonaje, V. H., & Nerlekar, S. (2017). Financial Performance Analysis of Selected Banks using CAMEL Approach. *IMR (Indira Management Review)* , 11 (2), 17-24.
- Suba, N. R. (2016). *Financial performance analysis of selected public and private sector banks a study through camel model*. The Thesis submitted to Saurashtra University.
- Williams, H. T. (2011). Determinants of capital adequacy in the Banking Sub-Sector of the Nigeria Economy: Efficacy of Camels.(A Model Specification with Co-Integration Analysis). *International Journal of Academic Research in Business and Social Sciences*, 1(3), 233.