

PERFORMANCE ANALYSIS OF SMALL FINANCE BANKS IN INDIA USING CAMELS MODEL

Poonam Mahajan*, Shikha Bhatia**

Abstract *Small Finance Banks (SFBs) are specialised banking institutions incorporated to serve the unbanked, small and underserved customers. Their primary motive is to improve financial access by providing access to essential financial services. This article examines the performance of ten SFBs in India over four years. The CAMELS model has been applied for performance analysis, which provides performance and ranking of various SFBs using the model's six parameters: Capital adequacy, Asset quality, Management, Earning quality, Liquidity and Sensitivity. This study will help identify SFBs in financial distress, which will be helpful in timely action for their revival. Financial analysts and credit rating agencies can also use the comparative performance of these banks to frame their opinion or ratings. The common public, including customers and investors, can frame their short-term and long-term investment decisions based on the performance and ranking of these institutions. Furthermore, a proper assessment of these banks is needed as their good performance can ensure that formal credit availability reaches the grassroots level.*

Keywords: *SFBs, Bank Performance, Capital Adequacy, Asset Quality, Management, Earning Quality, Liquidity, Sensitivity*

INTRODUCTION

India is on a growth trajectory like never before. Moreover, the renaissance of development has brought many positive changes- scope for all, growth for all. India is better placed than many other economies and is set to attain a higher status among world economies (Finacre SFB Annual Report 2021-22, p.2). The banking system in India is very different from any other nation because of its unique geographical, social and economic diversity. India's economic policy framework constitutes capitalist and socialistic features with a bias towards public sector investment. India has chosen growth-led export over export-led growth, unlike many other developing countries emphasise self-reliance. As of March 2022, there were 12 public sector banks, 21 private sector banks, 12 SFBs, 4 payment banks, 43 Regional Rural banks and 46 foreign sector banks, 1539 urban cooperatives and 97006 rural cooperative banks in India. The last few years saw remarkable changes in the Indian banking sector, especially in technology, whereby a digital revolution has shaped the growth trajectory (Subrahmanyam et al., 2021). The Reserve Bank of India (RBI) awarded small finance bank (SFB) licence to 12 institutions to provide financial assistance with the help of savings instruments and supply

credit to small business units, small and marginal farmers, micro and small industries and other unorganised sectors (Utkarsh SFB Annual Report 2022 p.41).

Small finance banks (SFBs) have emerged as essential players in the Indian banking industry, catering to the unbanked and underserved population of the country. These banks specifically focus on providing financial services to micro and small enterprises, low-income households and other financially excluded segments (Ali & Kaveri, 2021; Jayadev et al., 2017; Ray & Shantanu, 2021). SFBs received their license in 2015 from the RBI and are a recent addition to the Indian banking sector. SFBs serve as a saving vehicle for the unserved sections not being served by other banks, such as small business units, small and marginal farmers, micro and small industries and unorganised sector entities through high technology-low-cost operations. The SFBs aim to provide various financial services, including savings bank accounts, credit facilities, insurance and other financial products and are focusing on financial inclusion.

The idea to start SFBs proved to be an innovative decision to contribute to strengthening the Indian Banking system and financial inclusion. SFBs are essential for an emerging economy like India as they focus on the country's underserved population, promote financial inclusion

* Assistant Professor, Department of Commerce, Guru Nanak Dev University College, Narot Jaimal Singh, Pathankot, Punjab, India. Email: poonam_mcs@yahoo.co.in

** Associate Professor, Finance and Accounting Area, International Management Institute New Delhi, Delhi, India. Email: shikha.bhatia@imi.edu

and facilitate access to financial services. They help to reduce the dependence of such underserved sections of the population on informal sources of credit, which are often expensive and risky and provide them access to formal financial services. Their outreach helps improve savings and investment, thereby improving a country's economic growth and development (Jayadev et al., 2017; Ray & Shantanu, 2021).

The SFBs contribute towards financial access to small and medium enterprises, which helps them to grow. They are a reliable alternative for small businesses and entrepreneurs who find it difficult to get financial services from traditional channels. So, they play a crucial role by promoting job creation and entrepreneurship, which positively impacts the economy. Given their potential to improve financial inclusion and promote access of finance to the underserved, it is an important constituent of the Indian banking sector. They also importantly support the development of the MSME sector (Jayadev et al., 2017).

The number of SFBs and their outreach has been increasing steadily over the past few years, which also requires that they conform to the standards of commercial banks in terms of capital adequacy and other norms. They must be subjected to thorough performance analysis and regulatory control so that they continue to drive financial inclusion and economic growth. Notably, despite the growing importance of SFBs, the research on the performance of SFBs is scarce. This research paper aims to fill this gap by analysing the performance of SFBs in India using the CAMELS approach, a well-accepted framework for the performance analysis of banks. By providing a comprehensive analysis of the performance of SFBs, this paper aims to provide insights into the performance of these institutions and contribute to the broader understanding of the role of SFBs in promoting financial inclusion and economic growth.

OBJECTIVE OF THE STUDY

The objective of the present study is to assess the performance of SFBs in India using six parameters of the CAMELS model namely; Capital adequacy, Asset quality, Management, Earning quality, Liquidity and Sensitivity.

THEORETICAL BACKGROUND

The academic literature and economic theories like "credit creation theory of Banking", "Public service Theory of Financial Inclusion", "Private Money theory of Financial Inclusion and "Special Agent theory of Financial Inclusion" support the present paper framework. The Credit Creation theory of Banking states that commercial banks can generate money in an economy. Additionally, due to their

lending activities, banks produce deposits which create new purchasing power. The SFBs have been formed to provide essential banking functions such as accepting deposits and lending to small marginal farmers, micro and small industrial units and unorganised sectors. It will help them to trap the unprivileged society and expand credit creation in economy like India.

The public service theory of financial inclusion states that financial inclusion is a public responsibility the government owes its citizens, and the citizens expect the government to deliver formal financial services through public institutions (Ozili, 2020). SFBs were formed to bring mass people under one shelter to provide financial services at low cost. The present paper is based on this theory as SFBs are being regulated by the legal and regulatory requirements of the Banking Regulation Act, 1949; Reserve Bank of India Act, 1934; Indian Companies Act, 2013; FEMA, 1999; Payment and Settlement Systems Act, 2007; Credit Information Companies (Regulation) Act, 2005; Deposit Insurance and Credit Guarantee Corporation Act, 1961, etc. The public has confidence and trust in these ten banks as they were formed and regulated as scheduled commercial banks and adhere to the provisions of section 42 of the RBI Act, 1934.

The special agent theory of financial inclusion argues that special agents should deliver formal financial services to the excluded population. Often, providing formal financial services to unbanked adults can be difficult due to the nature of remote communities, their people or the geography. For this reason, specialised agents must be employed to deliver formal financial services to members of excluded communities. SFBs have been formed with the sole aim of providing banking services to unbanked customers. They are being served with various services of ATMs and issuance of Debit cards through SFBs in different regions of India.

LITERATURE REVIEW

Numerous studies have examined the performance of banks using various financial metrics (Akhtar et al., 2023; Lahouel et al., 2022; Al Zaidanin, 2020; Biswas & Bhattacharya, 2020; Nguyen et al., 2020). Focusing on the bank's performance and stability became crucial after the great financial crisis (Adusei, 2015). Moreover, focus on credit allocation is also critical for survival and growth of banks (Kasturi, 2019). It was important from the perspective of the central bank, the bank's management, customers, investors and the economy (Al Zaidanin, 2020).

Many research works focused on examining the performance of private sector banks and ranked various banks based on their performance (Garg, 2022; Biswas & Bhattacharya, 2020; Kumar & Malhotra, 2017). At the same

time, few authors focused on only public sector banks and their performance (Kaur et al., 2015; Misra & Aspal, 2013). Along similar lines, many authors focused on comparing the financial performance of public and private sector banks and found that private sector banks outperformed public sector counterparts on all parameters (Saikrishna & Varghese, 2020; Mayakakkannan & Jayasankar, 2020; Nanthini & Shanmugam, 2020; Panboli & Birda, 2019; Shukla, 2015).

The CAMELS model is considered an efficient methodology for experts and professionals to examine the performance of the banking system (Nguyen, 2011; Douglas, Lont, & Scott, 2014). For performance analysis of banks, the CAMELS model was the most frequently used framework (Rose & Hudgins, 2010; Rozzani & Rahman, 2013). It has been widely applied in banks in various countries across the world like European countries (Lahouel et al., 2022); Kenya (Kirimu et al., 2022); Qatar and Kuwait (Abuzarqa & Tarnóczy, 2021); Tanzania (Magoma et al., 2022); Turkey (Ghazavi & Bayraktar, 2018), UAE (Al Zaidanin, 2020) and Vietnam (Nguyen et al., 2020).

Furthermore, it was identified that an annual CAMELS scanning could help a bank to examine its financial health periodically and alert it to take preventive steps wherever necessary (Siva & Natarajan, 2011). CAMELS has also been applied to the performance analysis of microfinance companies (Saminathan & Madhankumar, 2020), new generation private banks (Biswas & Bhattacharya, 2020) and NBFCs (Anshu et al., 2021). In the case of SFBs, the research is scarce, and the number of years covered is limited (Ali & Kaveri, 2021; Ray & Shantanu, 2021). Furthermore, Ray and Shantanu (2021) applied CAMELS analysis on SFBs, but their analysis period was limited to a single financial year (2019–20).

The extant literature review shows that academicians and researchers have studied the performance of public, private and foreign sector banks. Many researchers discuss the concept of SFBs but a detailed study of the performance of SFBs over a multi-year has not yet been done.

The Hypothesis of the Study

Based on the discussion presented in the review of literature it is hypothesised that:

H₀: There is no significant difference in the financial performance of SFBs as assessed by the CAMELS model.

RESEARCH METHODOLOGY

The Capital SFB and Equitas SFBs started their operations in 2016, followed by seven more in 2017 and one more in 2018. The financial year 2017–18 has been dropped because many SFBs started their operation during the mid and end of 2017–18, so data was unavailable. Thus, the study covers four financial years from 2018–19 to 2021–22. 10 SFBs have been studied because they have been operational since 2017–18. Shivalik Small Finance Bank and Unity Small Finance Bank started their operations in 2021–22 and 2022–23, respectively, and have been excluded from the sample as their data was not sufficiently available for analysis.

The secondary data has been used for the present study. The data has been extracted from the websites of RBI and the annual reports of SFBs. The CAMELS model is used in the present study to analyse the performance of SFBs according to six factors. Various descriptives like mean, standard deviation and covariance have been calculated to rank SFBs for the CAMELS model. The ranking has been given using covariance because it indicates less variability around the mean.

Descriptives of SFBs

In order to examine the credit creation by SFBs, the data related to investments, advances, deposits, saving bank accounts and term deposits are collected and studied. As can be seen from Table 1, there has been growth in credit creation by SFBs.

Table 1: Credit Creation by SFBs (Rs in Crores)

Credit Creation (Rs in crore)	2018	2019	2020	2021	2022	CAGR
INVESTMENTS	9983.26	14952.69	24203.09	30659.83	41661.46	43%
ADVANCES	34878.49	59461.24	90554.44	108612.9	135802.36	40%
DEPOSITS	23093.72	49177.69	82487.77	109472.5	145730.52	58%
SAVING BANK	4282.74	7245.34	10283.5	22198.33	43576.83	79%
TERM DEPOSIT	17844.52	39977.7	69823.05	83309.96	96383.73	52%

Source: The authors.

The total investments increased from Rs 9983.26 cr in 2018 to 41661.46 cr in 2022, showing 43% CAGR means that

the SFBs are showing growth in the value of investments over five years. The advances of SFBs show an increasing

trend from Rs 34878.49 cr to Rs 135802.36 cr with a 40% CAGR. It measures their management performance and is a good sign of the growth of SFBs during the last five years. It also indicates earning potential of these banks. The deposits of SFBs have increased from Rs 23093.72 cr to Rs 145730.52 cr with a CAGR of 58%. It shows the basic building blocks of a bank's funding and liquidity profile. The CAGR of saving banks and term deposits is 79% and 52%, respectively, stating that they have sufficient funds for investment and lending. The deposits of SFBs are covered under Deposit Insurance and Credit Guarantee Corporation insurance cover that insures principal and interest up to a maximum of Rs 5 lakh in the same right and same capacity as on the date of liquidation. It insures all the deposits, such as saving, current and fixed deposits, etc.

The SFBs have brought many people under its umbrella by opening branches in unbanked areas for unserved people and through modern innovative techniques like ATMs and issuing debit and credit cards to customers. The same can be presented in Tables 2 and 3, respectively. Table 2 shows

that they have 1022, 2091, 1422 and 1069 branches in rural, semi-urban, urban and metropolitan regions by the end of the financial year 2021–22. Hence, a need was felt to study their performance during four years of the study.

Table 2: Number of Branches of SFBs (Area-Wise)

Region-Wise SFB	Number of Branches				
	2018	2019	2020	2021	2022
RURAL	354	681	830	890	1022
SEMI-URBAN	558	1262	1695	1922	2091
URBAN	431	840	1136	1316	1422
METROPOLITAN	391	630	825	974	1069

Source: The authors.

Tables 3 exhibits that 2262 ATMs have been opened in various regions of the country during last four years. They have issued 6,74,57,015 debit cards and 1,80,787 credit cards to various customers from the financial year 2018–19 to 2021–22.

Table 3: Number of ATMs and Cards Issued by SFBs

Year	Number of ATMs					Number of Cards	
	Rural	Semi Urban	Urban	Metropolitan	Total	Debit	Credit
2019	406	489	505	442	1842	8861178	0
2020	213	579	617	517	1926	15257217	0
2021	241	665	651	574	2131	18647224	11317
2022	217	740	722	583	2262	24691396	169470
Total	1077	2473	2495	2116		67457015	180787

Source: The authors

The SFBs showed a tremendous financial performance compared to public sector banks (PSBs) and private sector banks (PVBs), which is presented in Table 4 for the financial year 2021–22. Table 4 shows that the Cash Deposit ratio is 5.99%, lower than PVBs (7.20%) but higher than PSBs (5.81%), illustrating that SFBs are using their core funds for lending effectively and can meet short-term obligations and contingencies. The credit deposit ratio is 93.19% higher

than PSBs (66.72%) and PVBs (83.50%), showing that SFBs utilise their deposits effectively to advance economic credit. The ratio of priority sector advances to total advances of SFBs is 72.26% which is comparatively higher than PSBs (32.92%) and PVBs (34.30%). It explains that SFBs are encouraging the growth of the priority sector, which is considered essential for the development of the basic needs of the country with adequate and timely credit.

Table 4: Comparative Analysis of Selected Ratios of SFBs with PSBs and PVBs

Selected Financial Performance Parameters (Ratios)	Public Sector Banks (%)	Private Sector Banks (%)	Small Finance Banks (SFBs) (%)
Cash Deposit ratio	5.81	7.20	5.99
Credit Deposit ratio	66.72	83.50	93.19
Ratio of Priority sector Advances to Total Advances	32.92	34.30	72.26
Net Interest margin	2.44	3.58	6.88
Operating Profit to Total Assets	1.64	2.78	3.13
Return on Assets	0.55	1.45	0.53
Return on Equity	8.83	12.20	4.58

Selected Financial Performance Parameters (Ratios)	Public Sector Banks (%)	Private Sector Banks (%)	Small Finance Banks (SFBs) (%)
Return on Advances	6.9	7.1	15.8
CRAR	14.7	18.8	19.3
Gross NPA to Gross Advances	7.3	3.8	4.9
Net NPA to Net Advances	2.2	1.0	2.0

Source: The Report on Trends and progress of Banking in India (2022) released by RBI.

The net interest margin of SFBs is 6.88% indicating their financial stability. It is higher than PSBs (2.44%) and PVBs (3.58%), indicating that SFBs have made good use of their assets, as returns produced by investment are sufficient to offset interest expenses. The operating profit to Total assets ratio of SFBs is 3.13%, which is higher than PSBs (1.64%) and PVBs (2.78%), showing that SFBs manage their assets efficiently to earn profits. The Return on assets of SFBs (0.53%) is relatively at par with PSBs (0.55%) and lower than PVBs (1.45%), showing that since banks are highly leveraged, so 0.53% represents substantial revenues and profit for these banks. ROE is a better metric for assessing banks' market value and growth. The ROE of SFBs is 4.58%, which is comparatively lower than PSBs (8.83%) and PVBs (12.20%), shows that they are new entrants in the economy and at an early stage of their existence, they are incentivised to focus on managing capital to maximise shareholder value versus growing earnings.

The CRAR of SFBs is 19.3%, higher than the 8% (minimum) specified by RBI to maintain under Basel-III norms. It means SFBs are more resilient in financial turmoil such as the one witnessed during the global financial crisis of 2008 and the more local non-banking financial crisis of 2019. It indicates the sound financial health of SFBs. The spread of SFBs is 7.4% which is higher compared to PSBs (2.9%) and PVBs (3.9%), showing the financial health and profitability of SFBs.

The Return on advances of SFBs (15.8%) is comparatively higher than PSBs (6.9%) and PVBs (7.1%), showing that

these banks are earning sufficient returns on their advances. Net NPA to Net Advances and Gross NPA to gross advances ratio of SFBs is 2% and 4.9%, respectively lower than PSBs (2.2% and 7.3%) and PVBs (1% and 3.8%), explains that their recovery of NPAs is more than other banks. Thus, they are maintaining the trust of the public in the banks.

The above data shows that SFBs are doing comparatively well compared to PSBs and PVBs during the financial year 2021-22. Thus, a need is felt to study the performance of SFBs.

Analysis and Interpretation based on Six Parameters of the CAMELS Model

Capital Adequacy: Capital is like a cushion to absorb likely financial risk. Three ratios have been used to measure capital adequacy: capital adequacy ratio, total advances to total assets and government securities to total investment ratio. The Capital Adequacy Ratio is calculated as a percentage of the bank's risk-weighted credit exposure. It ensures the efficiency and stability of banks by lowering the risks of being insolvent. The bank's CRAR should not be less than 15% per RBI's guidelines concerning SFBs. The CAR of all SFBs is higher than 15% during the study period reflecting that they are in a better position to deal with unexpected losses due to the availability of adequate capital. The same can be presented in Table 5.

Table 5: Components of Capital Adequacy of Small Finance Banks

Small Finance Bank	Capital Adequacy Ratio		Total Advances to Total Assets Ratio		Govt securities to total Investment Ratio		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	Group Avg	Rank
AU Small Finance Bank Ltd	7.86	3	3.60	4	2.92	6	4.33	4
Capital Small Finance Bank Ltd	7.96	4	4.34	5	0.17	1	3.33	3
Equitas Small Finance Bank Ltd	4.76	1	3.51	3	1.48	4	2.67	1
ESAF Small Finance Bank Ltd	15.67	8	3.00	2	22.21	10	6.67	8
Fincare Small Finance Bank Ltd	14.36	6	1.97	1	0.24	2	3.00	2
Jana Small Finance Bank Ltd	12.29	5	6.03	7	0.92	3	5.00	5
North East Small Finance Bank Ltd	15.52	7	7.80	9	9.16	8	8.00	10

Small Finance Bank	Capital Adequacy Ratio		Total Advances to Total Assets Ratio		Govt securities to total Investment Ratio		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	Group Avg	Rank
Suryoday Small Finance Bank Ltd	19.48	9	9.61	10	13.67	9	6.33	7
Ujjivan Small Finance Bank Ltd	21.86	10	6.90	8	1.90	5	7.67	9
Utkarsh Small Finance Bank Ltd	5.14	2	5.35	6	5.68	7	5.00	5

Source: The authors.

Assets Quality: It means evaluating a bank's assets to measure its credit risk. It reflects the repayment capacity of a bank in terms of loans and interest to run its operations smoothly. The banks manage their asset quality through the conservative approach of managing bad debts (NPAs)

through rigorous follow-ups. Three ratios have been used to measure the asset quality of SFBs in India namely, total Investment to total assets ratio, Net NPA to Total Assets and Advances ratio in Table 6.

Table 6: Components of Assets Quality of Small Finance Banks

Small Finance Bank	Total Investment to Total Asset Ratio		Net NPA to Total Assets		Net NPA to Total Advances		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	Group Avg	Rank
AU Small Finance Bank Ltd	8.34	2	58.81	4	61.31	4	3.33	3
Capital Small Finance Bank Ltd	2.60	1	19.73	1	15.37	1	1.00	1
Equitas Small Finance Bank Ltd	12.43	3	26.70	2	26.05	2	2.33	2
ESAF Small Finance Bank Ltd	16.88	5	79.82	5	80.15	5	5.00	5
Fincare Small Finance Bank Ltd	13.88	4	92.07	6	92.71	6	5.33	6
Jana Small Finance Bank Ltd	22.13	8	41.11	3	44.44	3	4.67	4
North East Small Finance Bank Ltd	25.25	9	103.94	8	100.08	8	8.33	9
Suryoday Small Finance Bank Ltd	28.34	10	93.81	7	96.77	7	8.00	7
Ujjivan Small Finance Bank Ltd	20.94	7	129.00	10	130.98	10	9.00	10
Utkarsh Small Finance Bank Ltd	18.25	6	105.28	9	106.17	9	8.00	7

Source: The authors.

Management: It means a bank's efficiency in managing its operations so that profits can be maximised and costs can be minimised. It shows how efficiently employees manage business and profits to generate profits and reduce associated risks. The success of other elements like capital adequacy,

asset quality, earning quality, liquidity and sensitivity depends upon management efficiency. So, it is a crucial element to make this model effective. Three ratios: Business per employee, Profit per employee and total advances to total deposit ratio have been used in Table 7.

Table 7: Components of Management of Small Finance Banks

Small Finance Bank	Business Per Employee (Rs crore)		Profit Per Employee (Rs Lakh)		Total Advances to Total Deposit Ratio (%)		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	Group Avg	Rank
AU Small Finance Bank Ltd	11.14	1	26.87	4	12.48	4	3.00	1
Capital Small Finance Bank Ltd	15.13	3	43.75	5	3.58	1	3.00	1
Equitas Small Finance Bank Ltd	23.14	7	23.30	3	13.07	5	5.00	5
ESAF Small Finance Bank Ltd	16.90	4	54.63	7	7.34	2	4.33	4
Fincare Small Finance Bank Ltd	24.26	8	62.73	8	14.40	6	7.33	9
Jana Small Finance Bank Ltd	32.43	10	-225.67	2	23.14	9	7.00	7
North East Small Finance Bank Ltd	24.80	9	-724.33	1	86.22	10	6.67	6
Suryoday Small Finance Bank Ltd	18.57	5	226.50	9	16.74	7	7.00	7
Ujjivan Small Finance Bank Ltd	21.14	6	584.89	10	21.73	8	8.00	10
Utkarsh Small Finance Bank Ltd	13.51	2	53.04	6	8.73	3	3.67	3

Source: The authors.

Earning Quality: Banks derive income from interest from assets like loans and fees for services rendered to customers. It is measured with the help of ROA, Interest income to

total income, non-Interest Margin to Total Assets, operating profits to total assets and ROE. It reflects the ability of banks to generate profits from their quality assets in Table 8.

Table 8: Components of Earning Quality of Small Finance Banks

Small Finance Bank	ROA (%)		Interest Income to Total Income (%)		NIM to Total Assets (%)		Operating Profit to Total Assets (%)		ROE (%)		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	CV	Rank	CV	Rank	Group Avg	Rank
AU Small Finance Bank Ltd	22.25	4	5.33	10	5.58	4	28.75	7	19.02	2	5.4	5
Capital Small Finance Bank Ltd	29.07	5	0.16	1	6.46	5	30.35	8	25.07	4	4.6	3
Equitas Small Finance Bank Ltd	17.29	3	1.77	8	3.01	1	11.61	3	21.43	3	3.6	2
ESAF Small Finance Bank Ltd	62.09	7	1.29	5	11.09	8	9.12	2	60.98	6	5.6	6
Fincare Small Finance Bank Ltd	76.20	8	1.61	7	4.89	3	12.79	4	71.33	7	5.8	7
Jana Small Finance Bank Ltd	-213.85	2	4.97	9	18.19	9	1578.33	10	133.8	8	7.6	9
North East Small Finance Bank Ltd	-821.42	1	0.89	3	3.45	2	20.16	5	-459	1	2.4	1
Suryoday Small Finance Bank Ltd	185.44	9	1.19	4	18.77	10	36.50	9	189.4	9	8.2	10
Ujjivan Small Finance Bank Ltd	402.96	10	0.34	2	7.09	6	26.52	6	423.7	10	6.8	8
Utkarsh Small Finance Bank Ltd	60.09	6	1.42	6	7.10	7	4.34	1	58.11	5	5	4

Source: The authors

Liquidity: It is the ability of bank management to meet deposit outflows while continuing to fund demand for loans. It indicates timely information on risk and potential failures. It ensures the safety and soundness of SFBs. Liquid assets to

total assets and total deposits, demand deposits, cash deposit ratio and Investment deposit ratios have been used in Table 9 to illustrate the liquidity of SFBs.

Table 9: Components of Liquidity of Small Finance Banks

Small Finance Banks	Liquid Assets to Total Assets (%)		Cash Deposit Ratio (%)		Liquid Assets to Demand Deposits (%)		Investment Deposit Ratio (%)		Liquid Assets to Total Deposits (%)		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	CV	Rank	CV	Rank	group Average	Rank
AU Small Finance Bank Ltd	22.08	4	3.41	1	26.54	2	16.31	6	16.93	2	3	2
Capital Small Finance Bank Ltd	15.81	2	22.71	5	16.69	1	2.34	1	17.25	3	2.4	1
Equitas Small Finance Bank Ltd	29.55	8	18.19	4	51.00	7	7.91	3	32.80	7	5.8	5
ESAF Small Finance Bank Ltd	24.81	5	30.10	6	47.36	5	22.60	7	25.81	6	5.8	5
Fincare Small Finance Bank Ltd	13.37	1	14.13	2	85.35	9	22.68	8	11.97	1	4.2	3

Small Finance Banks	Liquid Assets to Total Assets (%)		Cash Deposit Ratio (%)		Liquid Assets to Demand Deposits (%)		Investment Deposit Ratio (%)		Liquid Assets to Total Deposits (%)		Composite Rank	
	CV	Rank	CV	Rank	CV	Rank	CV	Rank	CV	Rank	group Average	Rank
Jana Small Finance Bank Ltd	29.04	7	104.94	10	45.81	4	14.03	4	48.02	9	6.8	8
North East Small Finance Bank Ltd	21.30	3	71.03	9	114.15	10	53.80	10	62.67	10	8.4	10
Suryoday Small Finance Bank Ltd	33.33	10	43.80	8	45.46	3	28.99	9	25.52	5	7	9
Ujjivan Small Finance Bank Ltd	25.68	6	43.51	7	56.68	8	7.58	2	24.02	4	5.4	4
Utkarsh Small Finance Bank Ltd	33.04	9	17.73	3	47.45	6	15.85	5	39.30	8	6.2	7

Source: The authors.

Sensitivity: It covers how particular risk exposures can affect institutions. They manage it by monitoring the management of credit concentrations. It shows how sensitivity to changes in interest rates can affect earnings and capital in future. The spread ratio in Table 10 measures it.

Table 10: Components of Sensitivity of Small Finance Banks

Small Finance Banks	Spread Ratio (%)	
	CV	Rank
AU Small Finance Bank Ltd	4.88	3
Capital Small Finance Bank Ltd	6.58	5
Equitas Small Finance Bank Ltd	3.02	1
ESAF Small Finance Bank Ltd	11.11	8
Fincare Small Finance Bank Ltd	4.89	4
Jana Small Finance Bank Ltd	18.20	9
North East Small Finance Bank Ltd	3.51	2
Suryoday Small Finance Bank Ltd	18.85	10
Ujjivan Small Finance Bank Ltd	7.09	6
Utkarsh Small Finance Bank Ltd	7.15	7

Source: The authors.

CAMELS Model

CAMELS model helps the banks to focus on risk and some important ratios and try to manage and control possible crises. The group ranking of all SFBs has been considered in the present study and averaged to calculate the overall group ranking. The capital SFB attained first rank, followed by Equitas SFB, AU SFB, Fincare, Utkarsh, ESAF, North EAST SFB, Jana SFB and Ujjivan and last rank is attained by Suryoday SFB.

Table 11 shows that based on CAMELS ranking, Capital SFB is number 1, followed by Equitas SFB and AU SFB during the study period while Suryoday SFB is at 10th rank. The

reason could be that Capital SFB offers a diversified product portfolio with a sizeable book in multiple asset classes. They have the highest number of secured loans, 99% among all peers. Their NNPA (1.36%) is the lowest among SFBs as on March 31, 2022. It is well-positioned to capitalise on the growing Indian middle-class population with its full suite of products and services. They are capitalising on the growing middle class in India and the explosion in credit demand. It had its esteemed presence in the banking industry as a local area bank before its conversion to SFB. It had already established its substantial capital and retail base in deposits and advances. Moreover, it has the highest proportion of cash and bank balance as % of total assets in the balance sheet, indicating that it has low dependency on external funds or borrowings to cater to its short to medium-term assets side needs and can deploy the excess liquidity for growth in loan banks. They can manage their asset quality by lowering NPAs and managing their business and profits per employee, deposits and advances during the study period. They filed for an IPO with SEBI and got approval, and it will be a combination of a fresh issue and an offer for sale. They will try to raise 450 crore rupees from this IPO.

On the other hand, Equitas and AU SFB attained second and third rank in performance scores as calculated using the CAMELS model in the present study. Equitas SFB's performance regarding low-cost deposits and overall deposit growth has been strong. They managed sensitivity in interest risk, kept their capital adequacy better than peer banks and handled their NPAs better by maintaining the quality of assets and their earning quality during the study period. Their CAR stood at 25.16% as on March 31, 2022, which is higher than the target set by RBI, and they are using the proceeds raised from the IPO to increase the capital base. The growing demand for affordable housing and vehicles boosts its products. It has a market capitalisation of Rs 6205 cr and has made a profit of Rs 281 cr in 2022.

Table 11: CAMELS Model of Small Finance Banks

Small Finance Banks	C	A	M	E	L	S	Group Average	Rank
AU Small Finance Bank Ltd	4	3	1	5	2	3	3.00	3
Capital Small Finance Bank Ltd	3	1	1	3	1	5	2.33	1
Equitas Small Finance Bank Ltd	1	2	5	2	5	1	2.67	2
ESAF Small Finance Bank Ltd	8	5	4	6	5	8	6.00	6
Fincare Small Finance Bank Ltd	2	6	9	7	3	4	5.17	4
Jana Small Finance Bank Ltd	5	4	7	9	8	9	7.00	8
North East Small Finance Bank Ltd	10	9	6	1	10	2	6.33	7
Suryoday Small Finance Bank Ltd	7	7	7	10	9	10	8.33	10
Ujjivan Small Finance Bank Ltd	9	10	10	8	4	6	7.83	9
Utkarsh Small Finance Bank Ltd	5	7	3	4	7	7	5.50	5

Source: The authors

AU SFB is listed as Fortune India 500 Company. They provide a holistic bouquet of banking products to serve all customers' financial needs. Fincare SFB gained 4th rank in Table 11, illustrating that their commitment to fuel the aspirations of millions of unbanked and underbanked households remained the bedrock of their ship. 99.6% of saving accounts and 98.4% of fixed deposits were opened digitally by the bank to build a best-in-class digital bank delivering value to all stakeholders. They also won the Celent award for Audit process management and will have 32lakh+ customers by the end of the year 2022.

The Utkarsh SFB attained 5th rank in Table 11 shows that they are also doing well in expanding their customer base and serving unbanked and unserved sections of society. They crossed a deposit base of Rs 10000 cr, expanded their presence in the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu, crossed a customer base of 3 million and wholesale lending of Rs 800 cr in the year 2022. They registered year-on-year growth of 19.22% in total income, and 21.55% in operating profit in the year 2022 over the financial year 2021, and the increase aided it in their gross loan portfolio, rise in deposits, improved NPAs and operational expansions.

ESAF SFB attained 6th rank in the CAMELS model in terms of performance might be because their 95% assets are invested in micro finance and unsecured loans to increase

its customer base and create more job opportunities. Their businesses grew by 44% in the financial year 2022 with a positive trend of deposits and advances. The North East SFB has 17.04% CAR as of March 31, 2022, and fell to 11.26% on June 30, 2022, against the minimum requirement of 15% set by RBI. It is due to an extraordinary flood event in Assam's core operating territory.

RESULTS OF ANALYSIS

One-way ANOVA has been employed to assess the difference between and within the performance of SFBs using the CAMELS model. Table 12 exhibits the results of one-way ANOVA. The P value of the test is greater than 0.5, pointing towards statistically insignificant difference in the financial performance of 10 SFBs as examined by the CAMELS model. It implies that variation between and within groups of SFBs is not statistically significant. A perusal of Tables 5 to 11, reveal that there are differences in ranking of SFBs on different CAMELS parameters individually and on composite basis, however the analysis of variance test does not point towards conclusive and statistically significant differences. It indicates that all sample SFBs are doing well in all parameters of CAMELS framework. Notably, their financial and operating performance is improving as per results during period of study.

Table 12: ANOVA One-Way Results

ANOVA	SS	df	MS	F	P-Value	F Crit
Source of Variation						
Between Groups	1.425926	5	0.285185	0.030908	0.999493	2.408514
Within Groups	442.8889	48	9.226852			
Total	444.3148	53				

Source: The authors

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

Though the study examines the financial performance of SFBs, but it suffers from a few limitations. The study uses CAMELS analysis on cross-sectional data, and future research may examine the performance using a panel data set. Furthermore, the data period is restricted to four years; with the passage of time, more data will be available and a better trend in performance may be examined. A more sophisticated analysis may be performed for ranking using DEA analysis. The study is restricted to a single country, and future research may compare the performance of SFBs across emerging countries.

Implications of the Study

This study offers important implications for policymakers, analysts and the common public. The policymakers can use the study's findings to see whether the SFBs are performing well. The findings can also shed light on performance differentials pointing towards the need for specific banking interventions. Using such analysis, the SFBs in financial distress may be easily identified and timely action for their revival can be planned accordingly.

Financial analysts and credit rating agencies can also use the comparative performance of these banks and frame their opinion or ratings. The common public, including customers and investors, can take clues from the research and plan whether to transact with the SFBs, and if they plan to, then which of the available banks may be safer and better capitalised. Likewise, investors can frame their short-term and long-term investment decisions based on the performance and ranking of these institutions.

This study finds that individually SFBs differ across CAMELS parameters as well in composite CAMELS value. However, there is no significant difference in performance based on CAMELS framework of sample SFBs. This is an important theoretical implication for researchers to further examine the variations in performance of SFBs.

CONCLUSION OF THE STUDY

The study concludes by applying the CAMELS model that the SFBs are doing well in terms of credits, deposits, advances, expanded customer base, approaching towards the digitalised path and covering geographically and fruition in reaching out to the diverse needs of low- and medium-income groups. Since their launch, SFBs have not only reached the unbanked corners of the country but have also

increased financial awareness. While the public and private sector banks had a broad outreach, the penetration was not deep. SFB's stronghold will increase its share against the public and private sector banks. Additionally, the localised context gives SFBs, the unique ability to serve regional stakeholders, while maintaining operational efficiency more effectively. With their expansions in all regional rural areas, the motive to establish them for expanding financial inclusion will undoubtedly be achieved soon.

REFERENCES

- Abuzarqa, R., & Tarnóczy, T. (2021). Performance evaluation using the CAMELS model: A comparative study of local commercial banks in Qatar and Kuwait. *Banks and Bank Systems*, 16(3), 152-165.
- Adusei, M. (2015). The impact of bank size and funding risk on bank stability. *Cogent Economics & Finance*, 3(1), 1111489.
- Akhtar, S., Alam, M., Khan, A., & Shamshad, M. (2023). Measuring technical efficiency of banks vis-à-vis demonetization: An empirical analysis of Indian banking sector using CAMELS framework. *Quality & Quantity*, 57(2), 1739-1761.
- Al Zaidanin, J. S. (2020). Bank specific and macro-economic determinants of the United Arab Emirates commercial banks profitability: A panel data analysis. *International Journal of Advanced Research (IJAR)*, 8(10), 661-677.
- Ali, M. S., & Kaveri, V. S. (2021). Small finance banks in India: A review of performance. *Vinimaya*, 42(1), 5-29.
- Anshu, J. S., & Ahuja, K. (2021). A review study on financial performance of housing finance companies. *The Journal of Oriental Research Madras*, 124-127.
- Ben Lahouel, B., Taleb, L., Ben Zaied, Y., & Managi, S. (2022). Financial stability, liquidity risk and income diversification: Evidence from European banks using the CAMELS-DEA approach. *Annals of Operations Research*, 1-32.
- Biswas, S., & Bhattacharya, M. (2020). Financial performance analysis of new generation private sector banks: A CAMEL model approach in Indian context. *Journal of Commerce and Accounting Research*, 9(4), 37-44.
- Douglas, E., Lont, D., & Scott, T. (2014). Finance company failure in New Zealand during 2006-2009: Predictable failures? *Journal of Contemporary Accounting & Economics*, 10(3), 277-295.
- Garg, V. (2022). A camel model analysis of private sector banks in India. *American Journal of Economics and Business Management*, 5(12), 205-212.

- Ghazavi, M., & Bayraktar, S. (2018). Performance analysis of banks in turkey using camels approach case study: Six Turkish banks during 2005 to 2016. *İşletme Araştırmaları Dergisi*, 10(2), 847-874.
- Jayadev, M., Singh, H., & Kumar, P. (2017). Small finance banks: Challenges. *IIMB Management Review*, 29(4), 311-325.
- Kaur, J., Kaur, M., & Singh, S. (2015). Financial performance analysis of selected public sector banks: A CAMEL model approach. *International Journal of Applied Business and Economic Research*, 13(6), 4327-4348.
- Kasturi, R. (2019). Credit allocation by Indian commercial banks. *Journal of Commerce and Accounting Research*, 8(1), 1-7.
- Kirimi, P. N., Kariuki, S. N., & Ocharo, K. N. (2022). Financial soundness and performance: evidence from commercial banks in Kenya. *African Journal of Economic and Management Studies*, 13(4), 651-667.
- Kumar, V., & Malhotra, B. (2017). A camel model analysis of private banks in India. *EPRA International Journal of Economic and Business Review*, 5(7), 87-93.
- Magoma, A., Mbwambo, H., Sallwa, A., & Mwashu, N. (2022). Financial performance of listed commercial banks in Tanzania: A CAMEL model approach. *African Journal of Applied Research*, 8(1), 228-239.
- Mayakkannan, C. J. R., & Jayasankar, C. (2020). A study on performance evaluation of selected public and private sector banks through camel model in india. *Purakala Journal*, 31(25), 202-206.
- Misra, D. S., & Aspal, P. (2013). A CAMEL model analysis of State Bank Group. *World Journal of Social Sciences*, 3(4), 36-55.
- Nanthini, V., & Shanmugam, N. K. (2019). A study on financial performance of private sectors banks in India - A CAMEL model. *Think India Journal*, 22(14), 1609-1613.
- Nguyen, A. H., Nguyen, H. T., & Pham, H. T. (2020). Applying the CAMEL model to assess performance of commercial banks: Empirical evidence from Vietnam. *Banks and Bank Systems*, 15(2), 177-186.
- Panboli, S., & Birda, K. (2019). Camel research of selected private and public sector banks in India. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 1237-1248.
- Ray, M., & Shantnu, R. (2021). Financial analysis of small finance banks in India through CAMEL rating. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 12(4), 2059.
- Rose, P., & Hudgins, S. (2010). *Bank management and financial services* (8th ed.). McGraw Hill Companies.
- Rozzani, N., & Rahman, R. A. (2013). Camels and performance evaluation of banks in Malaysia: Conventional versus Islamic. *Journal of Islamic Finance and Business Research*, 2(1), 36-45.
- Saikrishna, M. B., & Varghese, A. (2020). A CAMEL model analysis of selected public (SBI) and private (HDFC) sector banks in India. *Studies in Indian Place Names*, 40(3), 2145-2152.
- Saminathan, R., & Madhankumar, R. (2020). Financial performance analysis of selected Indian micro-finance companies - A CAMEL model approach. *International Journal of Management*, 11(11), 3482-3491.
- Shukla, S. S. (2015). Analyzing financial strength of public and private sector banks: A CAMEL approach. *Pacific Business Review International*, 7(8), 44-50.
- Siva, S., & Natarajan, P. (2011). CAMEL rating scanning (CRS) of SBI groups. *Journal of Banking Financial Services and Insurance Research*, 1(7), 1-17.
- Subrahmanyam, N., Bhayani, S., Rao, P. V., & Rajan, G. (2021). Digital aspects of banking progress and way forward with special reference to a rural areas in Andhra Pradesh. *Journal of Commerce and Accounting Research*, 10(3), 72-78.