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# Financial Performance Analysis using CAMEL Model with Special reference to Listed Small Finance Banks in India

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# Abstract

Banking sector plays a vital role for the development of Indian economy. Over the past few years banking industry has gone through many changes. Small Finance Banks are recent banking initiative of Reserve Bank of India towards promotion of financial inclusion in India. The small finance banks in India play a prominent role as these banks provide services to the financially unincluded population. These banks provide basic services to the small-scale farmers and micro and small-scale industries. These banks will help in boosting the economy of the country as they provide services to major population of the country. The study is related to a period of five years from financial year 2017-2018 to 2021-2022. The study contains an assessment of the performance of SFBs using CAMEL Model. The analysis helped to measures the performance of banks from each of the important parameter like Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity.

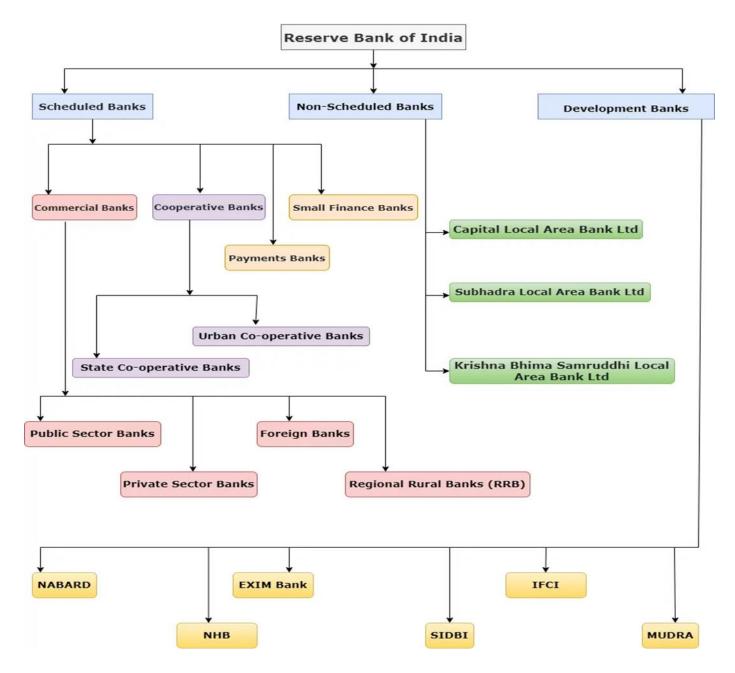
Keywords: Banking sector, Small finance banks, Performance Analysis, CAMEL Model.

# Introduction

Banking sector in India is growing at a faster pace and is also approaching capital market for adding more funds to shoot up further growth in the banking sector. Banking sector provides a wide range of services to a wide range of customers. It lends to almost all types of industries, hence it is considered as an integral part of the Indian economy and the performance of banking sector has an impact on the economy. Banking sector is considered as a barometer of economy which reflects the macroeconomic variables. In the year 2015, RBI has initiated a financial inclusion policy by setting up a different type of bank in our country. RBI has issued a provisional license for ten companies on September 17, 2015 to operate as small finance bank, in furtherance of the objectives for which it is set up, shall primarily undertake basic banking activities of acceptance of deposits and lending to unserved and underserved sections including small business units, small and marginal farmers, micro and small industries and unorganised sector entities. Small finance banks are the banks which provide services to certain uncovered segment of the society that are not served by Scheduled Commercial banks and Non-Banking Financial Institutions, such as small business units, small and marginal farmers, small scale industries and



unorganized sectors. These small finance banks play a major role in Indian economy as the majority of population have very minimal income. Structure of Indian banking System-



# CAMEL Model:

CAMEL stands for Capital Adequacy, Asset Quality, Management Competence, Earning Quality, and Liquidity. This model measures the performance of the organization using the above five parameters which helps in analysing the organizations performance from different point of views. It is a ratio-based model to analyse the performance of the banks. Camel models helps to rate the banks performance on a five-parameter scale.



# 1. Capital Adequacy:

it is important to analyse the capital structure of the banks because it is important to retain confidence of all the investors, and avoid the bank from being insolvent. It also deals with the ability of the bank to meet its additional financial requirements. The following ratios are measured to find the capital adequacy of the banks.

- **a.** Capital adequacy ratio
- **b.** Debt equity ratio
- **c.** Equity to total asset ratio

#### 2. Asset Quality:

this ratio helps to analyse the quality of assets of the banks i.e. what quality of loans are given to earn interest income. Quality of loan means less number of defaulters or non-performing assets. The major aim of this ratio is to measure the Non-performing assets as compared to the total assets. The following ratios are required to measure the asset quality of the banks.

- a. Gross NPAs to total Asset ratio
- **b.** Net NPA to total Advance ratio
- c. Total investment to total asset ratio

#### 3. Management Competence:

this ratio measures the competence of management to earn better returns and to add value to the shareholders. It measures the earnings on the basis of per employee which helps the management their contribution to know towards the banks. Management of a bank plays crucial role in making many strategic decisions. Therefore it is important to measure management efficiency. The following ratios are used to measure the management competence.

- a. Profit per employee
- b. Business per employee
- c. Interest income to total advances ratio

#### 4. Earning Quality:

As it is important to measure the earnings of the bank made through the assets employed it is also important to measure the quality of the earnings this means the consistency of earnings over the years. The ratios used to measure the earning quality are

- a. Return on asset ratio
- b. Return on equity ratio
- c. Operating profit to total assets ratio

#### 5. Liquidity:

managing liquidity is a big task for the bankers as they have to properly hedge their risk, earn better returns at the same time maintain liquidity to allow the investors to withdraw their investments whenever required. Therefore the banks must have a proper balance between liquidity, risk and returns. The following ratios are used to measure the liquidity of the banks.

- **a.** Cash to total assets
- **b.** Credit to total deposits



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#### c. Government securities to total assets

#### **Review of Literature**

**Purohit and Bothra (2018),** The performance of SBI and ICICI Bank was compared using CAMEL parameters in which it was found that ICICI bank needs to improve its position with regard to capital adequacy and asset quality while SBI need to improve its position with regard to management efficiency, earning quality and liquidity.

**Ramya** (2017), Analyse the financial performance of State Bank of India for the study period 2012-2016 through the use of CAMEL approach. It was concluded that there is a need to take necessary steps to improve the position of SBI in the context of few parameters i.e., debt-equity, operating profit, and non-interest income to total income.

**Muralidharan and Lingam (2017),** Measured and evaluated the financial performance of 5 banks from 2007-2016 namely Bank of Baroda, Punjab National Bank, Central Bank of India, Bank of India and Bank of Maharashtra. They gave ranking to all five banks based on each ratio.

**Hoti and Alshiqi (2014),** need to analyse the financial performance of the Banking system in Kosovo from 20062012 using camel model and by calculating return on investment. They concluded that they did not find any significance difference in the overall performance of the banks and this thing can only happen in the times of global financial crisis which was earlier faced by Kosovo, letting less sensitive effect. Most banks were found with health balance sheet with a small level of reserves for loans.

**Mishra and Aspal (2013)**, evaluated the performance and financial soundness of State Bank Group using CAMEL approach and rated different banks using through Capital adequacy, Asset quality Management efficiency, Earning Quality, and Liquidity.

**Priya Ponraj and Gurusamy Rajendran (2012),** measured the bank competitiveness among the select Indian commercial banks in terms of financial strength. Financial strength of the bank is measured in terms of financial ratios viz. efficiency ratio, profitability ratio, capital adequacy ratio, income-expenditure ratio, deposits and return ratios. It is found that foreign banks are the most competitive compared to the private and public sector banks in terms of the profitability ratio, returns ratio and capital adequacy ratio.

Anita Makkar (2013), analyzed comparative analysis of the financial performance of Indian commercial banks. The study concluded that on an average, there is no statistically significant difference in the financial performance of the public and private sector banks in India, but still, there is a need for overall improvement in the public sector banks to make their position strong in the competitive market.

**Gazia Jamil Sayed, Najmus Sahar Sayed:** comparative Analysis of Four Private Sector Banks as per CAMEL Rating: four private sector banks namely Axis Bank, HDFC Bank, ICICI Bank Ltd. and Kotak Mahindra Bank Ltd. The data used in the study relate to the banks which are among the list of 'Top Ten Banks in India - as per greenworldinvestor.com and ETIG database and are listed on the Bombay Stock Exchange (BSE). Each bank was analyzed for three years on the basis of CAMELS parameters based on the average ratios the banks were ranked for performance. The author suggests various other techniques of financial performance can be applied for future research.

**Mishra and Kumari (2011),** selected 12 public and private sector banks on the basis of market capture and measured the efficiency and soundness by Camel Model. From the analysis they ranked the banks. They said that HDFC takes the lead followed by ICICI and Axis Bank. Bank of Baroda and Punjab National Bank follows the fourth position held by IDBI and Kotak Mahindra Bank. Public Sector Banks



like SBI and Union Bank takes the back seat. It donates that Private Sector Banks are performing better than Public Sector Bank.

### **Research methodology**

**Type of research:** Descriptive research is been used for this study it describes the performance of the selected small finance banks over the years.

**Sample selected:** For the purpose of this study CAMEL analysis is done for 4 small finance banks. The criteria for selecting these small finance banks are listed on the National stock exchange during the period of study. Selected small finance banks are AU small finance bank, Equitas small finance bank, Suryoday small finance bank and Ujjivan small finance bank.

**Period of study:** the study is conducted based on the data collected for a period of 5 years beging from 2017-2018 to 2021-2022.

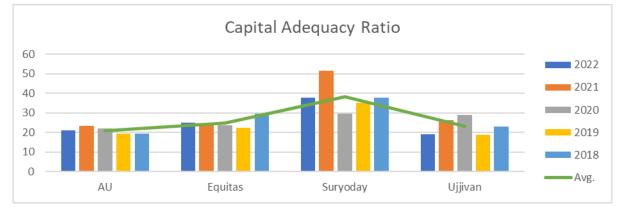
**Sources of data:** Secondary data like the financial statements of banks was collected through the annual reports of banks and the Ace Equity analyser software.

#### **Data Analysis and Interpretation**

1. Capital Adequacy

 Table 1: Capital Adequacy Ratio (CAR)

Year/Bank	AU	Equitas	Suryoday	Ujjivan
2022	20.99	25.16	37.86	18.99
2021	23.37	24.18	51.47	26.44
2020	21.99	23.61	29.57	28.81
2019	19.31	22.44	35.03	18.94
2018	19.31	29.63	37.94	23.04
Avg.	20.99	25.00	38.37	23.24
Rank	4	2	1	3



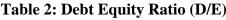
From the above analysis we can observe that Suryoday small finance bank maintained highest capital adequacy ratio followed by Equitas, Ujjivan and AU small finance Bank.

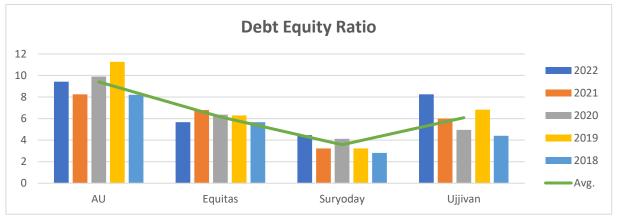


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Table 2: Debt Equity Ratio (D/E)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	9.43	5.67	4.46	8.25	
2021	8.25	6.79	3.23	5.99	
2020	9.90	6.37	4.12	4.96	
2019	11.27	6.29	3.23	6.82	
2018	8.20	5.66	2.81	4.41	
Avg.	9.41	6.16	3.57	6.09	

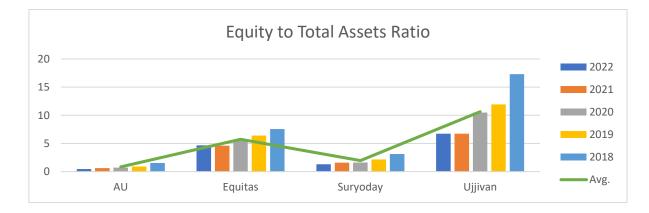




From the above analysis we can observe that on an average AU bank followed by Equitas, Ujjivan and Suryoday bank have higher debts in the bank which indicates high risk and low performance of the banks.

Table 3. Equity to Total Assets Katlo (E/ 114)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	0.46	4.65	1.3	6.73	
2021	0.61	4.61	1.58	6.74	
2020	0.72	5.45	1.61	10.47	
2019	0.9	6.38	2.17	11.93	
2018	1.52	7.56	3.12	17.31	
Avg.	0.84	5.73	1.96	10.64	
Rank	4	2	3	1	

#### Table 3: Equity to Total Assets Ratio (E/TA)

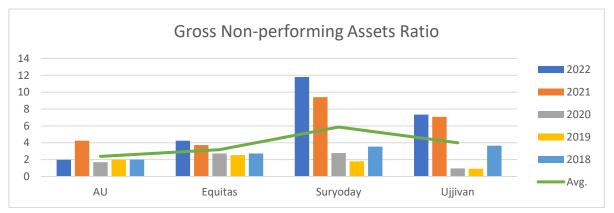




From the above analysis we can observe that Ujjivan small finance bank maintain highest equity to total assets ratio followed by Equitas, Suryoday and AU small finance bank.

#### 2. Assets Quality

Table 4: Gross Non-performing Assets Ratio (GNPA)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	1.98	4.24	11.8	7.34	
2021	4.25	3.73	9.41	7.07	
2020	1.70	2.72	2.79	0.97	
2019	2.00	2.53	1.80	0.92	
2018	2.00	2.73	3.54	3.65	
Avg.	2.39	3.19	5.87	3.99	
Rank	1	2	4	3	

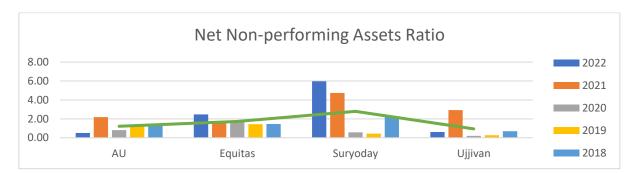


From the above analysis we can observe that Suryoday small finance bank has the highest GNPAs to total Assets followed by Ujjivan, Equitas and AU small finance bank.

Year/Banks	AU	Equitas	Suryoday	Ujjivan		
2022	0.50	2.47	5.97	0.61		
2021	2.18	1.58	4.73	2.93		
2020	0.81	1.66	0.57	0.2		
2019	1.29	1.44	0.44	0.26		
2018	1.27	1.46	2.25	0.69		
Avg.	1.21	1.72	2.79	0.94		
Rank	2	3	4	1		

#### Table 5: Net Non-performing Assets Ratio (NNPA)

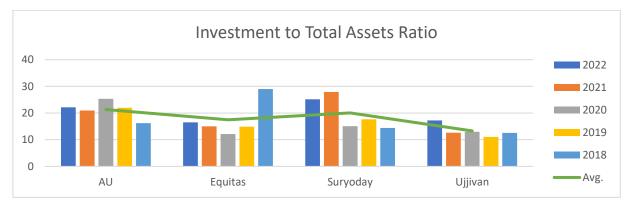




From the above analysis we can observe that Suryoday small finance bank has the highest NNPAs to total Assets followed by Equitas, AU and Ujjivan small finance bank.

Table 0. Investment to Total Assets Ratio (1/1A)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	22.16	16.51	25.15	17.26	
2021	20.96	15.00	27.92	12.63	
2020	25.31	12.13	15.07	12.98	
2019	21.95	14.87	17.66	11.04	
2018	16.20	28.98	14.39	12.56	
Avg.	21.32	17.50	20.04	13.29	
Rank	1	3	2	4	

# Table 6. Investment to Total Assets Patio (I/TA)

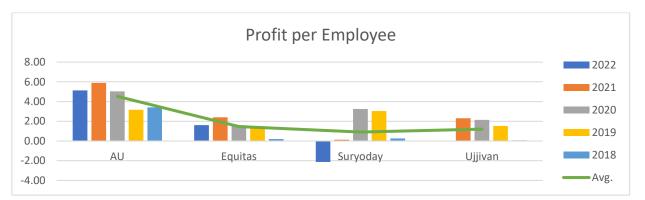


From the above analysis we can observe that AU small finance bank has the highest Investment to total Assets followed by Suryoday, Equitas and Ujjivan small finance bank.

# 3. Management Competence

Table 7: Profit per Employee (PPE) in lacs					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	5.13	1.61	(2.13)	(0.04)	
2021	5.89	2.40	0.13	2.31	
2020	5.03	1.60	3.24	2.15	
2019	3.17	1.50	3.04	1.53	
2018	3.41	0.20	0.26	0.06	
Avg.	4.53	1.46	0.91	1.20	
Rank	1	2	4	3	

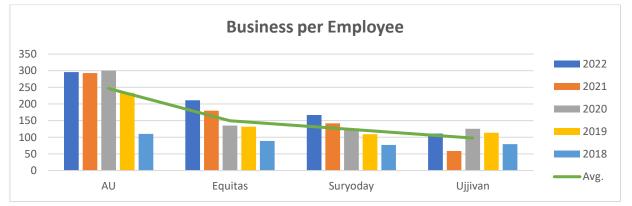




From the above analysis we can observe that AU and Equitas small finance bank has the highest profit per employee where as Suryoday and Ujjivan small finance banks incurred losses.

Year/Banks	AU	Equitas	Suryoday	Ujjivan
2022	296.00	211.00	167.00	111.12
2021	293.00	180.00	142.00	58.59
2020	300.00	135.00	123.00	125.64
2019	234.00	132.00	109.00	113.44
2018	110.00	89.00	77.00	79.37
Avg.	246.60	149.40	123.60	97.63
Rank	1	2	3	4

# Table 8: Business per Employee (BPE) in lacs.



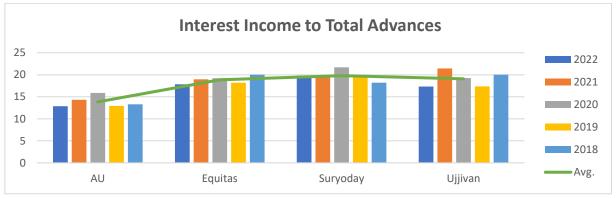
From the above analysis we can observe that AU small finance bank has the highest business per employee followed by Equitas, Suryoday and Ujjivan small finance bank.



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	Table 9: Interest Income to Total Advances (II/TD)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan		
2022	12.85	17.86	19.82	17.33		
2021	14.3	18.96	19.49	21.43		
2020	15.88	19.24	21.71	19.25		
2019	12.92	18.21	19.78	17.36		
2018	13.28	20.02	18.22	20.01		
Avg.	13.85	18.86	19.80	19.08		
Rank	4	3	1	2		

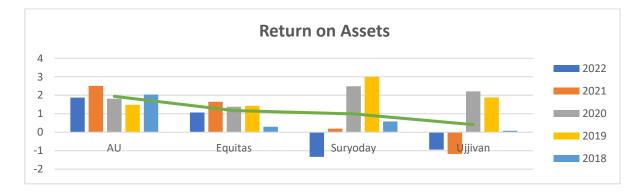


From the above analysis we can observe that Suryoday small finance bank has the highest Interest income to Total advances followed by Ujjivan, Equitas and AU small finance bank.

# 4. Earning Quality

Table 10. Return on Assets (ROA)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	1.87	1.07	-1.33	-0.94	
2021	2.5	1.65	0.19	-1.18	
2020	1.81	1.38	2.49	2.21	
2019	1.48	1.43	3	1.88	
2018	2.04	0.3	0.58	0.08	
Avg.	1.94	1.17	0.99	0.41	
Rank	1	2	3	4	

#### Table 10: Return on Assets (ROA)



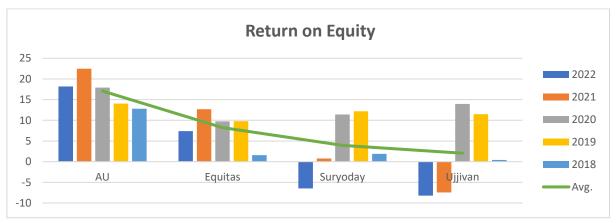


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From the above analysis we can observe that AU banks have utilised their assets efficiently and generated better return on assets as compared to other selected small finance banks.

Year/Banks	AU	Equitas	Suryoday	Ujjivan
2022	18.19	7.38	(6.49)	(8.22)
2021	22.46	12.7	0.78	(7.44)
2020	17.90	9.75	11.4	13.98
2019	14.03	9.80	12.19	11.49
2018	12.8	1.57	1.88	0.42
Avg.	17.08	8.24	3.95	2.05
Rank	1	2	3	4

#### Table 11: Return on Equity (ROE)

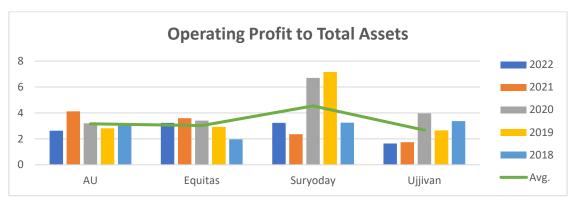


From the above analysis we can observe that AU small finance bank has the generate highest return to shareholders as a Return on Equity as compared to other selected small finance bank.

Tuble 12. Operating Profit to Potal Abbets (01/111)					
Year/Banks	AU	Equitas	Suryoday	Ujjivan	
2022	2.63	3.24	3.24	1.64	
2021	4.12	3.59	2.36	1.74	
2020	3.20	3.41	6.70	3.96	
2019	2.81	2.93	7.16	2.66	
2018	3.06	1.96	3.25	3.37	
Avg.	3.16	3.03	4.54	2.67	
Rank	2	3	1	4	

# Table 12: Operating Profit to Total Assets (OP/TA)



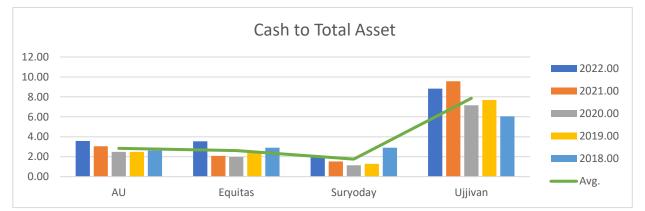


From the above analysis we can observe that Suryoday small finance bank has the highest Operating profit to Total assets followed by AU, Equitas and Ujjivan small finance bank.

# 5. Liquidity

 Table 13: Cash to Total Assets (C/TA)

Year/Banks	AU	Equitas	Suryoday	Ujjivan
2022	3.57	3.55	1.95	8.83
2021	3.04	2.08	1.53	9.57
2020	2.49	1.97	1.13	7.16
2019	2.49	2.55	1.28	7.69
2018	2.61	2.90	2.90	6.05
Avg.	2.84	2.61	1.76	7.86
Rank	2	3	4	1



From the above analysis we can observe that Ujjivan small finance bank have higher cash assets in total assets as compared to the AU, Equitas and Suryoday small finance bank.

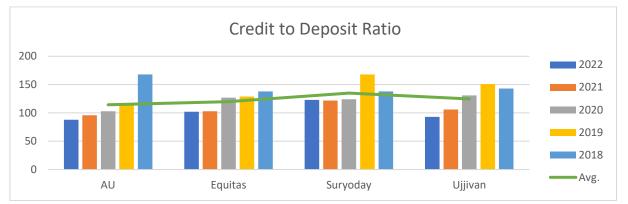


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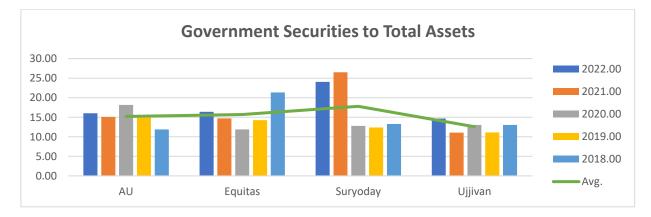
Table 14: Credit to Deposits Ratio (C/D)						
Year/Banks	AU	Equitas	Suryoday	Ujjivan		
2022	88.00	102.00	123.00	93.00		
2021	96.00	103.00	122.00	106.00		
2020	103.00	127.00	124.00	131.00		
2019	117.00	129.00	168.00	151.00		
2018	168.00	138.00	138.00	143.00		
Avg.	114.40	119.80	135.00	124.80		
Rank	4	3	1	3		

#### 



From the above analysis we can observe that Suryoday small finance bank have higher Credit to Deposit ratio as compared to the Ujjivan, Equitas and AU small finance bank.

Year/Banks	AU	Equitas	Suryoday	Ujjivan
2022	16.00	16.38	24.05	14.66
2021	15.08	14.69	26.49	11.08
2020	18.14	11.87	12.77	13.01
2019	14.89	14.24	12.39	11.11
2018	11.89	21.34	13.26	13.01
Avg.	15.20	15.70	17.79	12.57
Rank	3	2	1	4





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From the above analysis we can observe that Suryoday small finance bank have higher Investment in Government securities to Total assets ratio followed by Equitas, AU and Ujjivan, small finance bank.

# Conclusion

In this paper an attempt is made to study the financial performance of selected small finance banks. Through the study it is observed that In terms of capital adequacy Suryoday small finance banks have performed better, in terms of debt equity ratio AU small finance bank have more leverage compared to other banks, in terms of equity to total assets Ujjivan small finance bank maintain highest ratio. In terms of asset quality Suryoday small finance banks have high NPAs as compared to selected other small finance banks for the period, in terms of investment to total assets ratio of AU small finance banks was better for the selected period. In terms of management capability AU small finance bank have performed better in profit per employee ratio, business per employees ratio whereas Suryoday small finance banks are leading in interest income to total advances ratio. Overall AU small finance banks have performed better in management capability. In terms of earning capacity AU small finance banks have performed better in return to total assets ratio and return on equity, in terms of operating profit to total assets ratio Suryoday small finance banks have performed better, whereas Suryoday and Ujjivan small finance banks have also incurred losses in terms of return during the study period. In terms of liquidity Suryoday and AU small finance banks have better liquidity position. To conclude Camel model is a good measure to evaluate overall performance of the banks but using it solely may not be advised there are other value based measures like economic value added, market value added etc. which can be applied to know the economic financial performance of the banks. A combination of different methods will give better performance measurement.

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