The CAMEL Model as a Yardstick to Evaluate the Shadow Banks – the NBFCs of India

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Abstract

The Shadow banks - NBFCs (Non- Banking Financial Companies) are certainly valuable and crucial institution for the development and welfare of the Indian economy and living standards. Hence it is essential to compute and estimate their performance which should be done with compatible equipment such as CAMEL Model. This study has selected top 10 NBFCs on the criteria of market capitalization. The period of study is from 2016-17 to 2020-21. Examining these 10 NBFCs with five parameters of the CAMEL Model, it is surfaced that M & M financial services stands at the pinnacle score ranking 1st in the list, and L & T Finance remained at the foot of the list ranking 10th. The study also discovered that a company's performance cannot be judged relying on a single parameter such as market capitalization and must include consideration of various aspects and sections like the Capital, Asset Quality, Management Efficiency, Earning Capability and adequate liquidity as suggested in the CAMEL Model.

Keywords: Non -Banking Financial Companies, Shadow Banks, CAMEL Model

1. Introduction

India, being a destination of multifarious diversities in economy, financial activities and businesses emerges a vital need for existence of an efficient supporting hand of banks and NBFCs which can fulfil the financial and advisory assistance required for nation and its people. If banks prevail with gleaming knight amour in this nation today, the NBFCs –Shadow Banks, also cover a wide spectrum of tasks walking along with those banking institutions radiating its own shine. These two in conjunction, form a kingdom, flourishing prosperously and treading on the path of development successfully and continuously.

A country so budding with population, demands high increase in industrial and economic development and progress. This brings in picture the monetary issues. To settle the financial chaos, revolving around citizens and the Government, NBFCs are setup and harboured. Non-banking financial companies or Shadow banks are those financial institutions which provide banking services but are not given banking license by RBI.

NBFCs are an appreciably simple, smooth and easy mode which funds in many infrastructure projects and small scale companies which are important for any country. Like the banks, the presence of NBFCs is also important in the growth of the financial market. It provides small ticket loans, helps in mobilization of small savings, affordable housing projects, capital formation, gives long term credit, specialized credit, aids in employment, attracts foreign grants and acts as a Government's Instrument.

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NBFCs have productively reached rural areas, helped the weaker sections of the society, as well as small scale industrial sector, which has upgraded India's overall economy. They become a catalyst in providing modern and necessary facilities to the people of India.

As it provides so many innumerable services and facilities across the nation and at present more and more customers are getting acquainted and taking benefit of these services, it becomes necessary to gauge the financial health of these Shadow banks. Hence, this study is to check the soundness of these NBFCs for safeguarding the interest of the investors and the respective stake holders.

To appraise the soundness of the shadow banks - NBFCs, the globally acclaimed CAMEL model is deployed. After deciding the model for evaluation, the CAMEL approach, the top 10 Non-Banking Financial companies – "Shadow Banks" with the highest market capitalization is selected. This model shall analyse the performance of these selected Shadow banks on the basis of each parameter that is capital adequacy, asset quality, efficiency of the management, earning capability and the liquidity. Each parameter has been given equal weightage in the study.

2. Literature Review

(Ray & Shantu, 2021) The Central Bank of the country, RBI has developed and is promoting the Small finance Banks, as an element of Niche Banking. The Small Finance Banks encompasses all the weaker and unorganized sectors of the economy. These banks are investigated using the CAMEL rating for the study period 2019-20. Inferences are drawn using Anova Test and also Post Hoc Test is employed to draw the conclusions.

(kaur, Sunanda, Tungal, & Pandey, 2019) The paper is related to microfinance, better known as micro credit and envelopes major 4 Micro financial institutions on the criteria of the highest loan providers within the period of 3 years that is from 2015 to 2017. Apart of the various other methods to weigh the performance of such institutions the researchers have selected the most popular CAMELS model. All the parameters as suggested in the model are calculated for each and every institution to know their financial soundness and in the end necessary suggestions are also made by the researcher.

(Akhtar, Ahmad, & Md.Islam, 2018) A study on Non-Banking Financial Institutions located in Bangladesh is undertaken by the Author on 33 NBFIs of Bangladesh. Out of these 33, owned by the government are 3, 11 are owned jointly and rest 19 are owned on private basis. To estimate their soundness CAMELS Model is employed in the study. Ratings from 1 to 5 are assigned. Rating 1 being the more favourable and rating 5 as the least favourable. The findings surfaced that only 1 among the 33 rated at Strong, 15 scored at Satisfactory, 13 ranked as Fair and 3 showed Marginal financial soundness during the scrutiny period of June 2016.

(Kaur, 2016) usually CAMEL model is used to assess the banks but this study has undertaken a research on Non-Banking Financial Companies (NBFCs) that is Gold Loan providers operating in India, namely; Muthoot Finance Ltd. And Manappuram Finance Ltd. There is an ever increasing demand of Gold in India and hence the gold loan market has also shown growth in the present years. By using Simple Arithmetic mean, Independent t-test, SPSS- 16.0, the study concludes that though both performed well overall, Manappuram Finance Ltd is well off in capital adequacy whereas Muthoot Finance Ltd leads in the matter of management efficiency.

(Khatri, 2015) Regional Rural Banks' importance is highlighted in the study and that they are eminently important for lending the loans to the rural people and the farmers for at apt time and in an appropriate manner. These banking institutions not only provide credit facilities but are also a source of finance, employment to rural people and the remotest location of our country, India. Thus the researcher has attempted to surface the performance of Dena Gujarat Grameen Bank by CAMELS Model using different ratios over a selective period of time. The ratios which are a part of the model have been calculated individually and as a whole. Techniques like the line chart to depict the analysis of ratios and the trend of the credit facilities provided in the rural area was illustrated. The main emphasis is on the regional rural banks' performance in the period after the merger.

(Bansal & Mohanty, 2013) The researchers in this paper has included five banks of India based on market capitalization and they are SBI, HDFC Bank, ICICI Bank, Axis Bank and Kotak Mahindra Bank for the study period of 2007 to 2011. The CAMEL Model is used to know their performance and the study concludes that HDFC has ranked first, followed by SBI Bank as second rank, Kotak Mahindra Bank is on third rank, fourth rank is of ICICI Bank and 5th rank is secured by Axis Bank. To achieve these ranking number of financial ratios are calculated according to the parameters of the given model.

3. Research Gap

CAMEL Model is a globally used appliance to put banks under the microscope and survey their performance. What has been lacking, is to accommodate this model with NFBCs- Shadow banks. Barely few research works and studies have been undertaken with CAMEL Model's surveillance style for NFBCs. Therefore, this study sets to optimize the productivity of researches which computes the performance of NBFCs (Shadow Banks) by opting for the generally acclaimed CAMEL Approach.

4. Scope of the Study

The present study covers 10 Non-financial banking companies which operated during the period of 2016-17 to 2020-21. Financial ratios that will calculate the capital adequacy, asset quality, management efficiency, earnings quality and liquidity standing are used to test the performance of the NBFC.

5. Objectives of the Study

- To measure the capital adequacy of selected shadow banks
- To analyze the asset quality of selected shadow banks
- To evaluate the management efficiency of selected shadow banks
- To determine the earnings quality of selected shadow banks
- To assess the liquidity status of selected shadow banks

6. Research Methodology

To analyse and rate a bank's overall performance, U.S developed a CAMEL rating system, which is used to examine the banks in and outside U.S. It is a Supervisory Rating system. Federal Financial Institutions Examination Council (FFIEC) were the first to adopt it in 1979 and called it Uniform Financial Institutions Rating System (UFIRS), which was modified to CAMEL. Later it was used to access the financial condition of the non- banking financial institutions as well.

CAMEL Model is a model based on financial ratios calculating from the financial statement of the NBFCs. It is tool of management to determine the financial condition of the NBFCs. The study is analytical in nature.

6.1 Method of Analysis

CAMEL Components for Analysis of Selected Non- Banking Financial Companies

This model offers a simple way to ascertain and compare the financial position of a wide range of banks and NFBC with the help of the five parameters that are the initials of the five components unanimously form the word CAMEL.

- C- Capital adequacy

Capital and its source play a significant role in finding out the CAMEL rating of any institution. The Capital Adequacy Ratio - signifies that the NBFC has sufficient capital with reference to the risk weighted assets. RBI has recently declared a minimum ratio of 15% for NBFC operating in India. This ratio enables to analyze the financial solvency of NBFCs and whether the different risk associated with different assets is adequately covered by its existing capital. Higher Capital Adequacy Ratio is always better as it reflects better financial condition of the NBFC.

- A- Asset quality

Assets basically refers to the loans provided by the NBFCs which are shown in the balance sheet. These loans are judged by their portfolio quality and the level of risk that these assets are exposed to causing into non -performing assets.

- M- Management

To judge the management efficiency like planning, organizing, staffing, controlling and ability to react to financial stress this parameter is incorporated in CAMEL approach. The overall profitability, earning potentials, managing liquidity position, handling risks and facing the challenges of internal and external change in the environment is the task of the management of the NBFCs.

- E- Earnings

NBFC`s earnings, earning growth stability, net margins and trend are surveyed here in this parameter of the CAMEL Model. There are different ratios to calculate the Earnings criteria like Return on Equity, Return on Assets, Dividend Pay-out Ratio and likewise.

- L-Liquidity

The cash flow and availability of liquid cash and its equivalents also affects the rating. To maintain adequate cash flow requires efficient management of assets and liabilities. They both need to be accurately and optimal synchronized so as to reap the maximum gains.

Each of these parameters are looked into separately to judge whether the NBFC is in good health. The real time health of a NBFCs or Shadow banks can be known through this model at a given period of time and hence necessary and corrective measures can be suggested, sometimes well in advance which can save the NBFC from further losses.

6.2 Sample Size

Top 10 NBFCs according to market capitalization is selected for the study as on January 2022.

Table 1. Name of Companies Selected for the Study

Sr. No	Company name	Market Cap (Rs. Cr)	Last Price (Rs)
1	Bajaj Finance	445,033.13	7,155.90
2	Muthoot Finance	57,434.41	1,423.90
3	Shriram Transport finance Corp	32,565.16	1,233.05
4	Sundaram finance	25,610.55	2,253.00
5	Poonawalla finance	21,291.17	264.4
6	M & M financial services	19,163.07	153.7
7	L & T Finance	18,690.38	75.5
8	Motilal Oswal financial services	13,621.88	912.8
9	Manappuram Finance	12,958.30	157.1
10	Shriram City union finance	11,854.10	1,770.00

6.3 Sampling Technique

Convenient sampling technique is used in the study. The samples are selected based on market capitalization of the selected NFBCs.

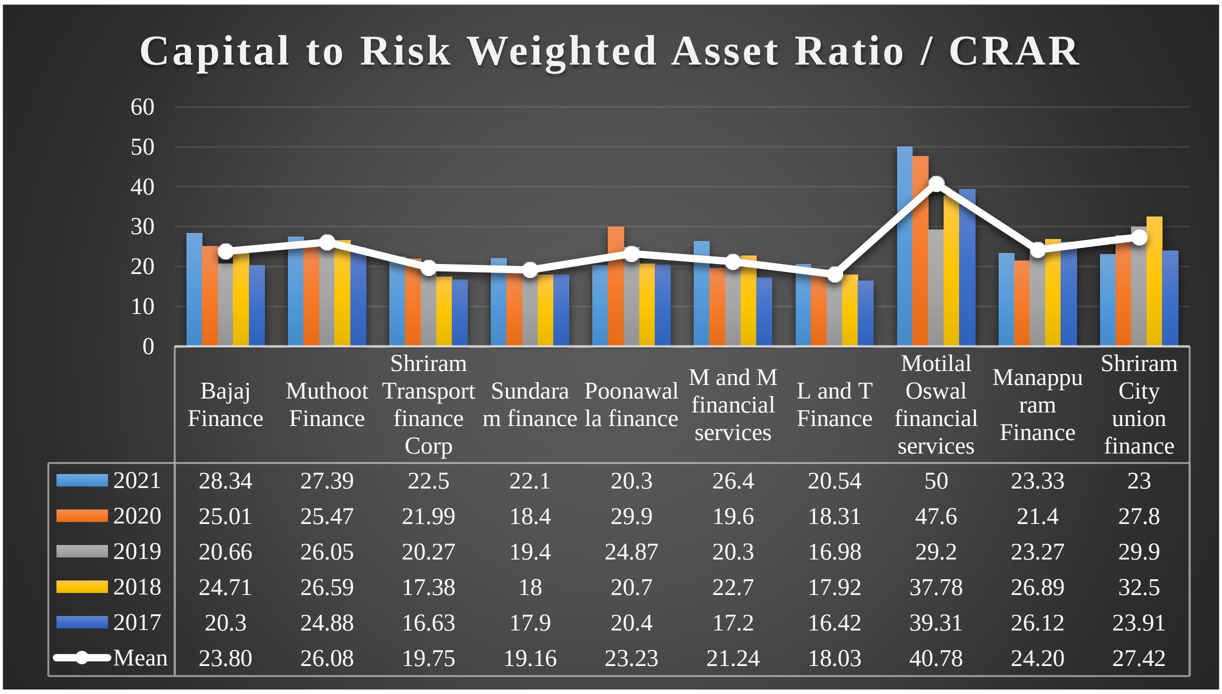
6.4 Period of Study

The study covers five years from 2016-17 to 2020-21 to rate the performance of selected NBFC- shadow banks under study.

6.5 Method of Data Collection

All the data are Secondary data and are taken from Annual Reports of the NBFCs, RBI bulletins & other websites like Money control which provides the required financial data for the study.

7. Data Analysis and Interpreteation

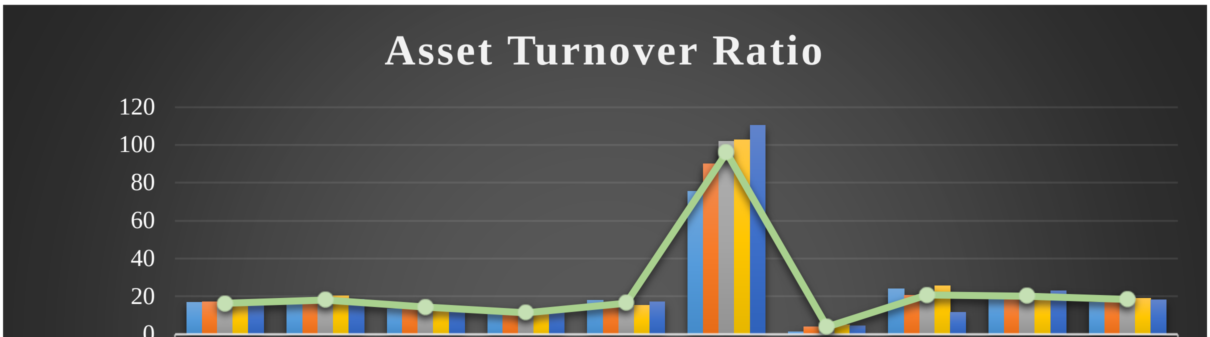


	Bajaj Finance	Muthoot Finance	Shriram Transport finance Corp	Sundaram finance	Poonawalla finance	M and M financial services	L and T Finance	Motilal Oswal financial services	Manappuram Finance	Shriram City union finance
2021	28.34	27.39	22.5	22.1	20.3	26.4	20.54	50	23.33	23
2020	25.01	25.47	21.99	18.4	29.9	19.6	18.31	47.6	21.4	27.8
2019	20.66	26.05	20.27	19.4	24.87	20.3	16.98	29.2	23.27	29.9
2018	24.71	26.59	17.38	18	20.7	22.7	17.92	37.78	26.89	32.5
2017	20.3	24.88	16.63	17.9	20.4	17.2	16.42	39.31	26.12	23.91
Mean	23.80	26.08	19.75	19.16	23.23	21.24	18.03	40.78	24.20	27.42

Fig. 1. Capital to Risk Weighted Asset Ratio / CRAR

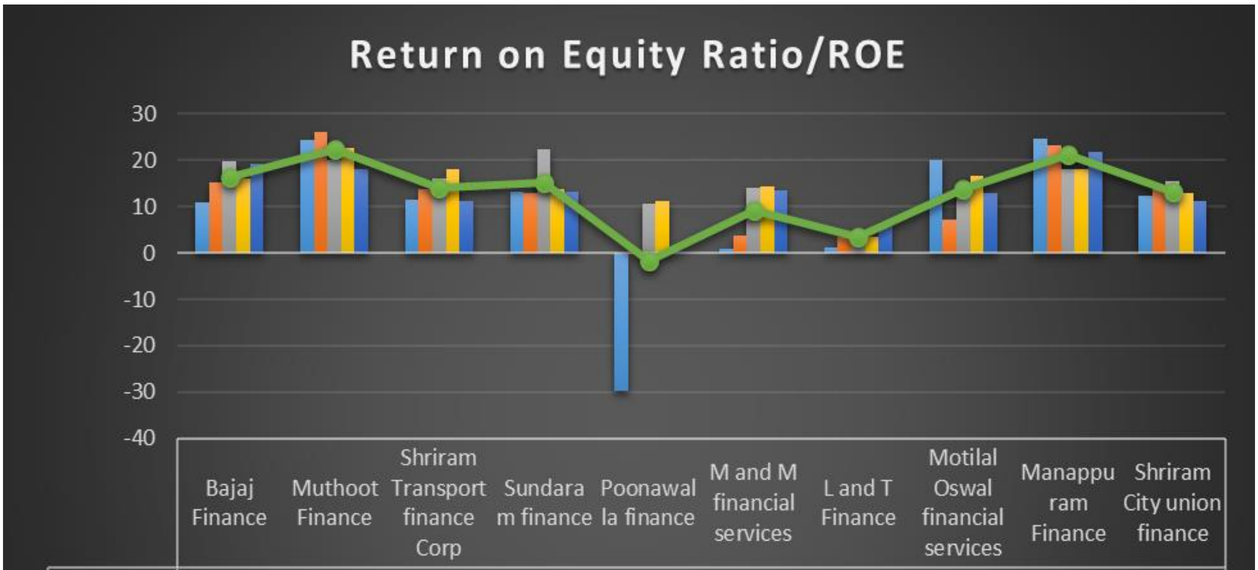
	Bajaj Finance	Muthoot Finance	Shriram Transport finance Corp	Sundaram finance	Poonawalla finance	M and M financial services	L and T Finance	Motilal Oswal financial services	Manappuram Finance	Shriram City union finance
2021	81.75	85.19	21.14	84.13	82.82	77.82	10.10	8.58	82.09	80.15
2020	82.18	84.43	23.32	83.92	86.26	87.74	10.08	3.24	79.16	85.92
2019	87.72	91.76	25.63	88.89	87.64	91.31	5.61	9.18	85.03	91.75
2018	0.31	95.83	26.52	85.25	89.58	91.96	11.04	11.85	87.99	94.37
2017	0.79	89.29	30.86	83.21	88.23	92.41	8.89	30.54	89.52	93.58
Mean	50.55	89.3	25.49	85.08	86.91	88.25	9.14	12.68	84.76	89.15

Fig. 2. Total Loan and Advance/ Total Assets



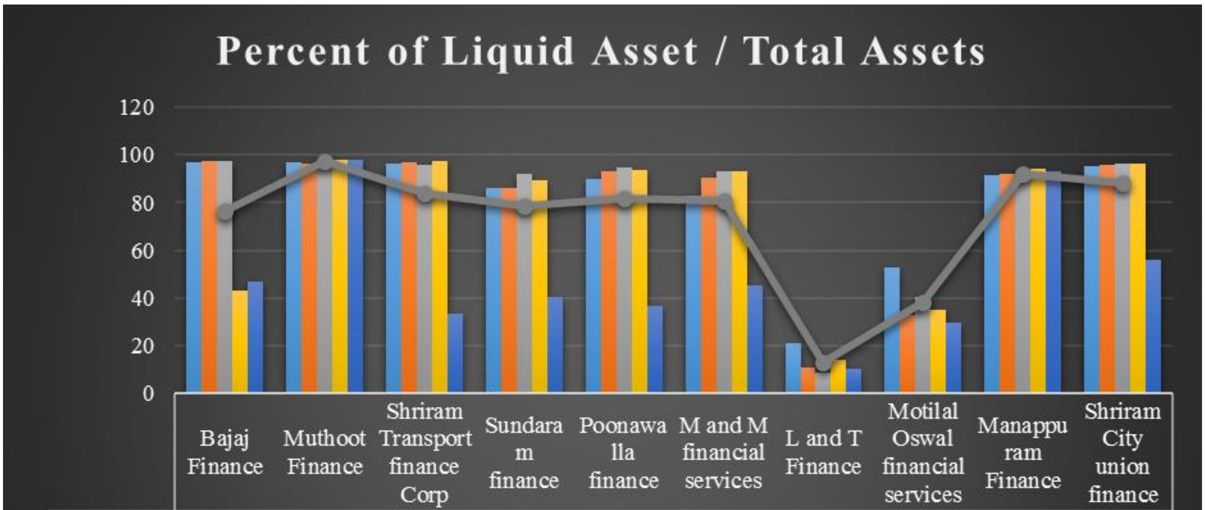
	Bajaj Finance	Muthoot Finance	Shriram Transport finance Corp	Sundaram finance	Poonawalla finance	M and M financial services	L and T Finance	Motilal Oswal financial services	Manappuram Finance	Shriram City union finance
2021	17.01	16.63	13.43	11.31	17.87	75.58	1.33	24	20.16	16.75
2020	17.26	17.27	14.5	11.49	16.8	90.07	4.19	20.58	18.11	18.99
2019	16.02	18.06	14.74	11.08	14.88	101.74	4.79	21.33	19.37	19.64
2018	15.88	20.35	13.67	10.87	15.2	102.67	4.94	25.68	20.05	18.87
2017	15.63	18.65	14.55	12.29	17.31	110.22	4.35	11.36	22.87	18.06
Mean	16.36	18.19	14.18	11.41	16.41	96.06	3.92	20.59	20.11	18.46

Fig. 3. Asset Turnover Ratio



	Bajaj Finance	Muthoot Finance	Shriram Transport finance Corp	Sundaram finance	Poonawalla finance	M and M financial services	L and T Finance	Motilal Oswal financial services	Manappuram Finance	Shriram City union finance
2021	11	24.42	11.53	13.09	-29.78	0.77	1.05	20.17	24.6	12.45
2020	15.34	26.08	13.89	13.05	-0.39	3.86	3.4	7.11	23.11	13.88
2019	19.88	20.13	16.19	22.33	10.76	14.01	3.41	12.42	17.99	15.47
2018	16.02	22.75	18.12	13.63	11.11	14.37	3.46	16.51	18.07	12.79
2017	19.13	18.1	11.12	13.22	0.29	13.6	6.04	12.89	21.92	11.05
Mean	16.27	22.30	14.17	15.06	-1.60	9.32	3.47	13.82	21.14	13.13

Fig. 4. Return on Equity Ratio/ ROE



	Bajaj Finance	Muthoot Finance	Shriram Transport finance Corp	Sundaram finance	Poonawalla finance	M and M financial services	L and T Finance	Motilal Oswal financial services	Manappuram Finance	Shriram City union finance
2021	97.05	96.88	96.41	86.2	90.16	82.77	21.39	52.93	91.3	95.53
2020	97.23	96.51	96.7	86.14	93.32	90.45	10.9	32.8	92.05	96.05
2019	97.69	96.65	95.57	92.05	94.84	93.01	8.62	40.4	90.8	96.23
2018	43.2	97.86	97.27	89.17	93.62	92.92	14.24	35.07	94	96.4
2017	46.79	98.06	33.64	40.7	36.68	45.3	10.62	29.95	93.08	56.06
Mean	76.39	97.19	83.92	78.85	81.72	80.89	13.15	38.23	92.25	88.05

Fig. 5. Percent of Liquid Asset / Total Assets

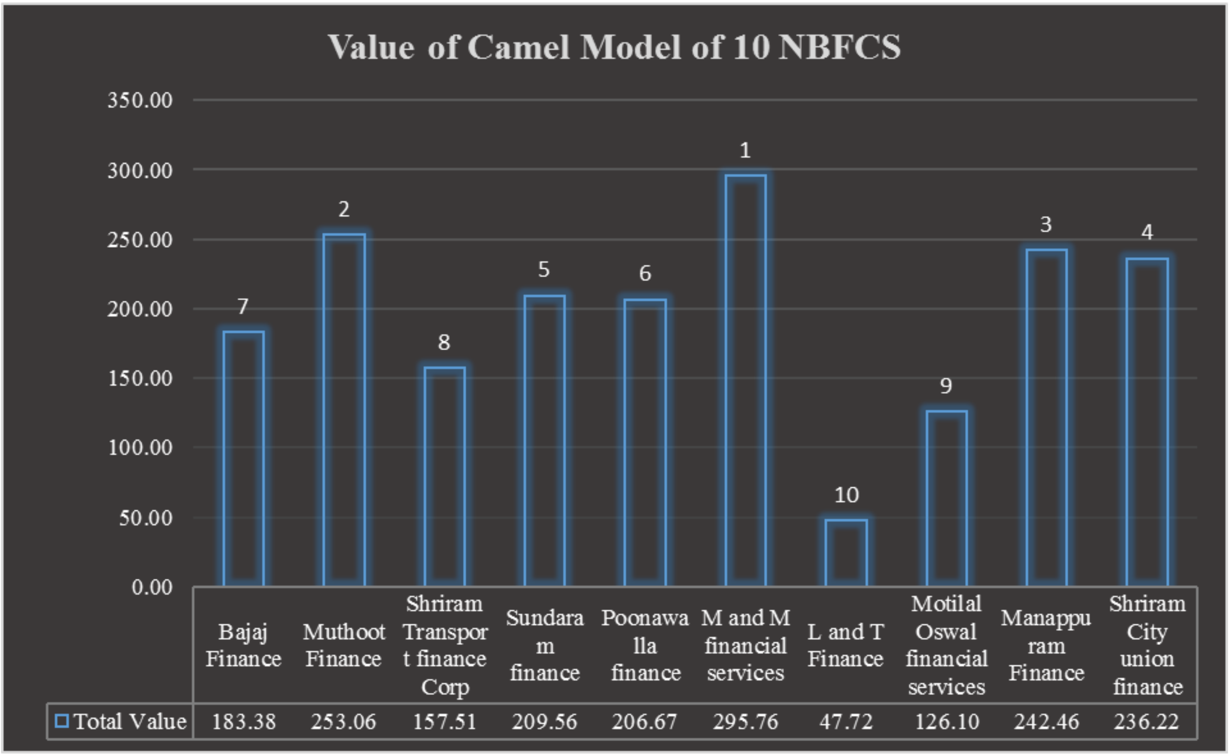


Fig. 6. Value of Camel Model of 10 NBFCS

Interpretation of Figure 1:

The analysis of Figure 1 depicts that the CRAR of Motilal Oswal financial services was all time high and the least CRAR during the study period was of Land T Finance. All the 10 NBFC were able to maintain minimum threshold of 15% of CRAR, all throughout the five years as stated and required by the RBI notification.

Interpretation of Figure 2:

Loans and advances to Total Asset ratio is taken as a criterion for measuring the soundness of NBFC. Larger issuance of loans stands a risk of those credit turning into bad loans. To be on the safer side lesser the loans, lower is the risk of creation of NPA. Keeping this concept in view it is clear that L & T and Motilal Oswal financial services has lower ratio of Total Loans to Total Assets from 2016-17 to 2020-21. Sundaram Finance, Poonawalla Finance and M & M financial services share almost the same ratio and they are followed by the rest of the NBFCs.

Interpretation of Figure 3:

It is very evident from the Figure 3 that M & M financial services is the leader when it comes to calculating of the Asset Turnover Ratio. This NBFC is far ahead of the rest in the list. In contrast to this L & T Finance has proven to be the worst performer in the context of Asset turnover ratio. Expect the above two companies the remaining eight NBFCs have been playing at quite an average level in the industry.

Interpretation of Figure 4:

A very interesting fact has surfaced from Figure 4 data analysis and that is the Return On Equity ratio of all the NBFCs expect Poonawalla Finance are positive and all have fared well during 2016-17 to 2020-21. Poonawalla Finance's ROE slumped drastically in the year 2021 and recorded the ratio as low as -29.78 %. It also faced a negative ROE of -0.39 in 2020. The highest ROE among all the above NBFCs is that of Muthoot Finance having a mean value of 22.30.

Interpretation of Figure 5:

As seen in figure 5, Muthoot Finance enjoys the highest liquidity position as it has a mean of 97.19 placing it in the first position while considering the percent of Liquid Asset to Total Assets ratio. This NBFC remained successful in maintaining this ratio above 97 percent for straight three years from 2019 to 2021. It is followed by Manappuram Finance with the mean of 92.25. The least in the ladder is L & T Finance which has acquired a mere mean value of 13.15.

Interpretation of Figure 6:

The Total value in figure 6 is derived from the summation of the means of each variable of CAMEL Model as shown in table 2, that is capital adequacy, quality of the asset, efficiency of the management, earning capability and liquidity of 10 NBFCs under the study.

M & M financial services' performance have been top notch acquiring the total value of 295.76 and therefore it stands first in the ranking system. Muthoot Finance competing well, has derived the total value of 253.06 keeping itself at rank second. Manappuram Finance- 3th rank and Shriram City Union Finance- 4th rank showcase nearly similar total values of 242.46 and 236.22 respectively. Similarly, the NBFCs at 5th and 6th rank, Sundaram Finance and Poonawalla Finance, also display a very marginal difference in their total values. The 7th rank is claimed by Bajaj Finance followed by Shriram Transport Finance Corp at 8th rank and Motilal Oswal financial services at 9th rank. L & T Finance's CAMEL evaluation highlights its lagging behind scores which plunges this NBFC at the bottom most with debasing total value of 47.72 compared to its counterparts.

Table 2: Value of CAMEL Model of 10 NBFCs

Sr.No	Name of the Company	C	A	M	E	L	Total Value	Rank
1	Bajaj Finance	23.80	50.55	16.36	16.27	76.39	183.38	7
2	Muthoot Finance	26.08	89.30	18.19	22.30	97.19	253.06	2
3	Shriram Transport finance Corp	19.75	25.49	14.18	14.17	83.92	157.51	8
4	Sundaram finance	19.16	85.08	11.41	15.06	78.85	209.56	5
5	Poonawalla finance	23.23	86.91	16.41	-1.60	81.72	206.67	6
6	M & M financial services	21.24	88.25	96.06	9.32	80.89	295.76	1
7	L & T Finance	18.03	9.14	3.92	3.47	13.15	47.72	10
8	Motilal Oswal financial services	40.78	12.68	20.59	13.82	38.23	126.10	9
9	Manappuram Finance	24.20	84.76	20.11	21.14	92.25	242.46	3
10	Shriram City union finance	27.42	89.15	18.46	13.13	88.05	236.22	4

8. Findings and Conclusion

The shadow banks - NBFCs scrutinized in this study through CAMEL Model are the 10 companies with highest market capitalization. While ranging at the top also, they reflect high variation when analysed with regards to the different parameters of the model and show vivid modulation in the statistical inferences. This signifies their competitive aptitude amongst each other. As it can be seen that most of the NFBCs are close runner ups to each other.

Furthermore, the study reveals the craft work of the economic world today as we see above that Bajaj Finance having the highest market capitalization among the rest 9 NBFCs has been downsized to 7th position according to the CAMEL Approach. Likewise, disparity is also seen in case of Shriram City Union Finance Company having ranked 4th in spite of being at the bottom of the list.

By this we extract that intricacies of the market of present day can only be completely understood by magnifying into greater details and checking various financial and supervisory frameworks and tools that are available and not just a single variable that is market capitalization.

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