A STUDY ON FINANCIAL PERFORMANCE OF NON-BANKING FINANCIAL COMPANIES

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ABSTRACT

One of the fastest growing financial sectors in India is the Banking sector, but at present times the Non-Banking financial services (NBFCs) has become a key financial services provider. Financial soundness of any banking service provideris essential for its sustainability. This aim of this paper is to evaluate the performance of NBFCs using four models Altman's Z score, Fulmer H model, Sprinate Z model, CAMEL and CAMEL Rating model which measures parameters like Capital adequacy, Asset quality, Management efficiency, Earning quality and liquidity. The financial performance as evaluated by the four models show that the NBFC Muthoot finance performed well with respect to the measures of the variable, followed by Bajaj finance ltd and Shriram transport finance company ltd secured second place.

KEYWORDS: *CAMEL, NBFCs, Altman's Z Score, Sprinate Z Model, Fulmer H Model.*

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Introduction

A Non-banking financial company (NBFC) is a company registered under the Companies Act 1956 and as per companies Act 2013, NBFC can be engaged in the business of lending loan, leasing, hire-purchase, acquisition of shares or stocks, bonds, debentures or securities issued by government or local authority. NBFCs lend and make investments and hence their activities differ from banks, namely NBFC cannot accept demand deposits, do not form part of the payment and settlement system and cannot issue cheques drawn on itself, Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.

A non-banking financial institution (NBFI) or non-bank financial company (NBFC) does not have a full banking license but facilitate bank-related financial services like investment, contractual savings, and market brokering and risk pooling. NBFCs are categorized, in terms of the type of liabilities into Deposit and Non-Deposit accepting NBFCs, Non deposit taking NBFCs by their size into systemically important and other non-deposit holding companies.

According to Moody's reportits talked about the crises of the banking industry, NBFCs have been facing Liquidity crisis followed by the Bankruptcy of IL&LS in September 2018 which led to severe repercussions. The report also quoted that the banks made them risky in bad loans would reflect in the country's economy whichhas grown increasingly dependent on the non-banking lenders for the provision of the credit. (The Economics Time on Dec 13,2019).

There are presently about more than 11k NBFC's in India (Economic times Feb 22,2019)and it is important to examine the financial performance of the NBFC's to understand their performance. In this context, this study aims to examine the financial performance of the leading ten NBFC's in India using the four models Altman's Z score, Fulmer H model, Sprinate Z model, CAMEL and CAMEL Rating models.

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Review of Literature

The following reviews discusses the studies on the CAMEL and ALTMAN models which were employed

- **Camel Model**

Gowri & Ramya (2013) studied on banking sector by using the CAMEL model and have noted that its helps to analysis the various aspects of convergence, soundness and financial performance of the Indian private and public sector bank. **Jamil et.al (2013)** performed a comparative analysis of four private sector bank KotakMahindra, ICICI, HDFC and Axis banks as per CAMEL Rating to analyse the banks performance and its solvency position by calculating the financial ratios to measure the financial soundness and efficiency of a bank. **Tripathi et.al (2014)** analysed the capital adequacy, loans to total assets, net profit ratio, current assets and quick assets, debt equity ratio, spread ratio for the four private banks by using CAMEL model. **Ahmed & Malik (2015)** evaluated the influence of credit risk management practices on loan performance (LP), credit terms and policy (CTP),client appraisal (CA),collection policy (CP), credit risk control (CRC).**Krishna et.al (2015)** studied on the financial performance of PUBLIC sector banks in India using CAMEL model and noted that the banking sector reforms were aimed at making banks more efficient. **Kumar & Malhotra(2017)**used the CAMEL model analysis of private banks in India to evaluate the performance the performance and financial soundness of selected private banks in India for the period 2007-2017 by using CAMEL model.

- **Altman Model**

Bardia (2012) studied the financial distress and evaluating long term solvency by demonstrating how to analyse tools and techniques to enhance the users decisions and also company valuation for lending decisions. **Kasilingam & Ramasundaram(2012)** developed the model for predicting solvency of Non-banking financial institutions in India by using Fulmer model and Springate model. The study analysed 25 NBFC including housing finance companies catering to asset finance, infrastructure finance, investment finance and housing finance. **Hamid et.al (2016)** studied to predict the financial distress of NFBI of Bangladesh using Altman"s Z score and Dupont model, and suggested the shareholders, including regulatory authorities and researchers to be cautious of the operations of NBFIs. **Venkadesh(2017)** analysed the Non-Banking financial companies in Tamil Nadu, to find out the short term and long term solvency of selected NBFCs. **Kumari & Prasad (2017)**evaluated the financial performance of select Indian banks using EAGLES model, to monitor the financial condition of commercial banks. **Mall et.al (2019)** predicted the financial solvency of commercial borrowers of Non-banking financial companies, financial solvency and credit worthiness of the borrower's and financial distress of the firms.

The review on the above models show that studies were carried out to examine the financial performance and solvency banks, borrowers of NBFCs but there was little evidence on the financial performance and solvency of NBFCs banks. Also, a number of studies were directed towards analysing financial solvency using one or two models.

Objectives

The objectives framed for the study are:

- To analyse and compare the Financial Position and Performance of the NBFCs by Applying CAMEL Model and CAMEL RATING.

- Financial soundness of the NBFCs by using Springate model and Fulmer model.

Methodology

The study uses Descriptive research design and the population of the study are Non-Banking financial company in India which account to more than 11000 in number (Economic times Feb 22,2019). The sample considered are top 10 NBFCs which were Power Finance Corporation Limited, Shriram Transport Finance Company Limited, Bajaj Finance Limited, Mahindra & Mahindra Financial Services Limited, HDB Financial Services, Cholamandalam Investment and Financial Company Limited, Tata Capital Financial Services, L&T Financial Limited, Rural Electrific Corporation Limited and Muthoot Financial Limited. The data on their financial statements were sourced from the Annual reports of the respective NBFCs. The time period of the research project was three years (2017-2019) to find out the financial performance of Top 10NBFCs .

Theoretical Framework

The four Theoretical models used in the project to analysis the financial performance of NBFCs are:

Altman Z-Score

This model provides the new Z-score value on which the performance is evaluated

$$Z\text{-Score} = 6.65 X1 + 3.26 X2 + 6.72X3 + 1.05 X4 + 3.25 \qquad (1)$$

X1= Working Capital/Total Assets

X2= Retained Earnings/Total Assets

X3 = Earnings before Interest & Tax/Total Assets

X4 = Book Value of Equity/Book Value of Liabilities

Interpretation of Z-Score

Z < 1.23 Distress Zone

Z > 2.9 Safe Zone

1.23 < Z < 2.9 Grey Zone.

Fulmer H Score

The Fulmer model takes the following form:

$$H = 5.528v1 + 0.212v2 + 0.073v3 + 1.270v4 - 0.120v5 + 2.335v6 + 0.575v7 + 1.083v8 + 0.894v9 - 6.075 \qquad (2)$$

Failed H <0

v1 = Retained Earnings / Total Assets

v2 = Sales / Total Assets

v3 = Net Income before Taxes (EBIT) / Equity

v4 = Cash Flow / Total Debt

v5 = Debt / Total Assets

v6 = Current liabilities / Total Assets

v7 = Log Tangible Total Assets

v8 = Working Capital / Total Debt

v9 = Log EBIT / Interest

Springate Z Score

The Springate model takes the following form:

$$Z = 1.03 X1 + 3.07 X2 + 0.66 X3 + 0.4 X4 \qquad (3)$$

Failed Z <0.862

X1 = Working Capital / Total Assets

X2 = Net Income before Interest and Taxes (EBIT) / Total Assets

X3 = Net Income before Taxes (EBIT) / Current liabilities

X4 = Sales / Total Assets

Camels Model

- Capital adequacy
    - Capital Adequacy Ratio (CAR)
    - Debt Equity Ratio
    - Total Advances to Total Asset
    - G Sec to Total Investments
- Asset Quality
    - Gross NPA Ratio
    - Net NPA Ratio

- Management Efficiency
    - Asset Turnover Ratio
    - Business per Employee
- Earnings and Profitability
    - Net Profit Ratio
    - Earnings per Share
    - Return on Net Worth
    - Return on Assets
- Liquidity
    - Current Ratio
    - Liquidity Asset to Total Asset
    - G Sec to Total Asset.

Analysis and Interpretation

- **Description of NBFCs**

The details of the selected NBFCs namely the Year of establishment, Turnver and Income for the year 2019 are discussed in Table 1. It can be seen that among the Top ten NBFCs included organisations eighty years of establishment (Muthoot Financial Ltd) and recently established organisations (HDB Financial Services). The turnover also ranged from 25,000 Crores INR (Rural Electrific Corporation Ltd) to thousand crores INR (Bajaj Finance Ltd)

Table 1: Descriptive Details of NBFCs

Name of NBFCs	Year of establishment	Turnover in Crores (INR) for 2019	Profit in Crores (INR) for 2019
Power Finance Corporation Ltd	1986	28,842.00	6,952.92
Shriram Transport Finance Company Ltd	1979	15,545.70	2,563.98
Bajaj Finance Ltd	1991	1,149.37	148.70
Mahindra& Mahindra Financial Services Ltd	1991	8,809.81	1,557.06
HDB Financial Services	2007	8724.81	1,153.24
Cholamandalam Investment and Financial Company Ltd	1978	6,991.97	1,186.15
TataCapital Financial Services	2007	5,529.68	653.61
L&T Financial Ltd	2008	7,182.81	845.96
Rural Electrific Corporation Ltd	1969	25,341.16	5,763.72
Muthoot Financial Ltd	1939	6,880.6	1,972.1

Financial Position and Performance of the NBFCs by Applying CAMEL Model and CAMEL Rating

- **Camels Model and Camel Rating**

Table 2: Camels Model and Camel Rating

	Power	Shriram	Bajaj	Mahindra	HDB	Cholam	Tata	L&T	Rural	Muthoot
C	6	2	2	2	5	9	7	7	9	1
A	10	9	1	8	2	4	3	6	6	5
M	9	2	1	7	7	2	2	10	2	2
E	6	2	5	8	6	4	9	10	3	1
L	7	2	4	4	4	8	10	1	8	3
Average	7.6	3.4	2.60	5.8	4.8	5.40	6.2	6.8	5.6	2.40
Rank	10	3	2	7	4	5	8	9	6	1

The CAMEL model and rating was used to find out rate the banks accordingly to their performance. By calculating the all the mentioned ratios in CAMEL model the financial performance of the NBFCs were ascertained. It is evident from the above analysis that Muthoot Finance Ltd is ranked at the top most position in among top 10 NBFCs, followed by Bajaj finance ltd, Shriram transport finance company ltd, HDB financial services, Cholamandalam finance, Rural Eletrific corporation ltd, Mahindra & Mahindra Financial Services ltd, Tata capital financial services ltd, L&T finance ltd, Power finance corporation ltd with respect to the constructs:

- Capital adequacy, Muthoot finance ltd stands the top position with the less risk-free capital adequacy compared to other NBFCs, Rural Electrific Corporation ltd and cholamandalam finance ltd stands at the last position due to its poor performance in Debt equity ratio and G-sec to total investment.

- Asset Quality, Bajaj financial ltd occupied first rank, had the lowest Gross NPA and Net NPA Ratio. Most of the loans and assets and recovering activities were found to be better ranking respectively. Power finance corporation ltd in stands the last position in Gross and Net NPA ratio, it should be improved much better to reach the Bajaj and HDBFS.

- Management Soundness, Bajaj finance ltd stands the first position because it maintaining the good stage in both asset turnover ratio and business per employee.

- Earnings and Profitability, Muthoot finance ltd is at the top position with the group average rank. Second position with the Shriram transport finance company limited. The last position goes to L&T finance ltd because due to the poor performance in all the ratio in earnings and profitability like Net profit ratio,Earning per share, Return on net worth, Return on asset.

- Liquidity, top position with the L&T finance ltd with the good performance of all the three ratio in the liquidity, second position with the shriram transport finance company ltd. From the above table it shows that last position in liquidity stands with the Tata capital financial services ltd.

- **Altman's Z Score**

Table 3: Altman's Z Score

BANK	2019	2018	2017	MEAN	RANK
POWER FINANCE CORPORATION LIMITED	1.32	1.31	1.15	1.26	8
SHRIRAM FINANCE	2.17	2.06	1.88	2.04	3
BAJAJ FINANCE	2.09	2.26	1.95	2.10	2
MAHINDRA FINANCE	1.97	2.05	1.77	1.93	4
HDB FINANCIAL SERVICE	1.83	1.84	1.96	1.88	5
CHOLAMANDALAM FINANCE	1.44	1.48	1.55	1.49	7
TATA CAPITAL FINANCIAL SERVICES LTD	1.19	1.12	1.14	1.15	10
L&T FINANCE LTD	1.55	1.42	1.23	1.40	9
RURAL ELECTRIFIC CORP LTD	1.43	1.57	1.93	1.64	6
MUTHOOT FINANCE LTD	3.03	3.05	2.67	2.92	1

Distress zone
Grey zone
Safe zone

The ALTMAN"S Z score calculation when above 2.90 is SAFE zone, below 1.23 is DISTRESS zone, in between 1.23 to 2.90 is GREY zone, and for the NBFCs for three years (2017-2019) from the average score of the NBFCs as seen in Table 6.2.2, it can be concluded that Tata capital Financial Services Ltd z score is 1.15 or less than 1.23, so that it is bankrupt area (distress zone). Muthoot Finance Ltd z score is 2.92 or above 2.90, so that it is in SAFE zone. The o other banks had values between 1.23 to 2.90, and hence was in GREY zone.

Financial soundness of the NBFCs by using Springate model and Fulmer model

- **Fulmer H Score Model**

Table 4: Fulmer H Score Model

BANK	2019	2018	2017	MEAN	RANK
POWER FINANCE CORPORATION LIMITED	-0.301	-0.394	-0.489	-0.39	10
SHRIRAM FINANCE	1.051	0.956	0.952	0.99	2
BAJAJ FINANCE	0.945	0.776	0.63	0.78	3
MAHINDRA FINANCE	0.788	0.648	0.55	0.66	4
HDB FINANCIAL SERVICE	0.545	0.429	-0.02	0.32	7
CHOLAMANDALAM FINANCE	0.57	0.37	0.25	0.40	6
TATA CAPITAL FINANCIAL SERVICES LTD	0.21	0.17	0.02	0.13	8
L&T FINANCE LTD	0.166	-0.06	-0.26	-0.05	9
RURAL ELECTRIFIC CORP LTD	0.66	0.58	0.61	0.62	5
MUTHOOT FINANCE LTD	1.67	2.03	1.29	1.66	1

NOT FAILED

FAILED

The FULMER H score calculation and interpretation are when less than zero (0) is failed and zero (0) & above zero (0) model is not failed. Therefore,from Table 6.3.1, it can be seen theaverage score for theNBFCs for three years (2017-2019) it can be concluded that Power Finance corporation Ltd and L&T Finance Ltd H score -0.39 and -0.05, so that it is failed in H score model. The other banks had value zero (0) and above zero (0), and hence it was not failed in H score model.

- **Springate Model**

Table 5: Springate Model

BANK	2019	2018	2017	MEAN	RANK
POWER FINANCE CORPORATION LIMITED	0.444	0.438	0.309	0.40	10
SHRIRAM FINANCE	0.628	0.608	0.529	0.59	3
BAJAJ FINANCE	0.611	0.628	0.613	0.62	2
MAHINDRA FINANCE	0.579	0.567	0.506	0.55	4
HDB FINANCIAL SERVICE	0.549	0.543	0.423	0.51	7
CHOLAMANDALAM FINANCE	0.507	0.507	0.529	0.51	5
TATA CAPITAL FINANCIAL SERVICES LTD	0.431	0.412	0.412	0.42	9
L&T FINANCE LTD	0.494	0.404	0.364	0.42	8
RURAL ELECTRIFIC CORP LTD	0.447	0.467	0.609	0.51	6
MUTHOOT FINANCE LTD	0.88	0.928	0.831	0.88	1

FAILED

NOT FAILED

The interpretation of the calculations of SPRINGATE Z score are less than 0.862 is failed and above 0.862 is not failed. From the average score for the NBFCs shown in Table 6.3.2, it can be concluded that Muthoot finance ltd Z score is 0.88 it is above 0.862value, so that it is not failed. All the other banks had value less than 0.862, hence the performance failed in Z score Springate model.

Overall Performance of Nbfcs by Using The Four Models

Table 5: Overall Performance of NBFCS by using the Four Models

	Power	Shriram	Bajaj	Mahindra	HDB	Cholam	Tata	L&T	Rural	Muthoot
ALTMAN'S Z SCORE	8	3	2	4	5	7	10	9	6	1
FULMER H MODEL	10	2	3	4	7	6	8	9	5	1
SPRINGATE Z MODEL	10	3	2	4	7	5	9	8	6	1
CAMEL MODEL	10	3	2	7	4	5	8	9	6	1
Average	9.5	2.75	2.25	4.75	5.75	5.75	8.75	8.75	5.75	1.00
Rank	10	3	2	4	5	5	8	8	5	1

- The financial performance and soundness of Muthoot Finance Ltd was found to be meet the criteria of all the four models (Altman"s model, Springate model, Fulmer model and CAMEL & CAMEL Rating model). and was expected to perform better in the upcoming years

- Power Finance Corporation Ltd was in last position from the four models analysis with respect to the performance. It can be inferred from the above Table 6.4, that Power Finance Corporation Ltd had lower performance during this study period but expected to rise in the forthcoming years.

- The other NBFCs, Shriram Transport Finance Ltd, Bajaj Finance Ltd, Mahindra& Mahindra Financial Services Ltd, Cholamandalam Finance, Rural Electrific Corporation Ltd, Tata Financial Services Ltd and L&T Finance Ltd had similar performance on the select period.

Conclusion

The study aimed to examine the financial performance of NBFCs and from the results from of Financial soundness of the Top 10 NBFCs, Muthoot Finance was found to lead among all NBFCs performance. However, for Power Finance Corporation Ltd it was found to be less and expected to fall in the upcoming years. The other NBFCs were found to have the same performance during the three years and have similar performance in the future period. The findings of the study can be of use to academicians and researchers since the performance of the NBFCs had remained an unexplored area and performance of other NBFCs and other time periods can be taken as a future scope of the study.

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