



AN EMPIRICAL ANALYSIS OF FINANCIAL HEALTH OF SHRIRAM TRANSPORT FINANCE COMPANY LTD (STFC)

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ABSTRACT

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Shriram Transport finance company Limited (STFC) is a non-banking finance company (NBFC) having approximately five to six percent share of market in new trade financing and about twenty five percent market share of pre-owned trade financing. The company customer base is more than 18 lacs. It has exposed to continuous increasing competition from banking sector and other NBFCs. Revenue of the company is placed at 6th rank among its top ten companies. In our study timeframe, it has also faced challenge of COVID-19. All these factors have affected performance of the company therefore it becomes pertinent to look into the financial performance and soundness of the company by using an analysis tool in order to determine its healthy zone.

This paper is quantitative and empirical in nature which is based on secondary data collected from various records, websites, reports and financial books of the company. Altman 'Z' score has been used to judge the financial position of the STFC. Altman Z score has been used to analyse the financial health and soundness of the company. This score has been found out by including ratio of working capital to total assets, retained earnings to total assets, EBIT to total assets ratio, market value of equity to total liabilities ratio and net operating revenue to total assets ratios. Therefore, this analysis suggests five accounting ratios in order to prepare a solvency index and uses as an effective tool to evaluate corporate performance to predict bankruptcy. Multiple discriminant analysis (MDA) has applied for the period 2011-12 to 2021-22 to determine the financial health of the company. At last, various measures have been suggested to improve the financial position of the company in future.

KEYWORDS: STFC, Finance, COVID-19, Financial Health, NBFC, Z Score

INTRODUCTION

Shriram Transport Finance Company Ltd (STFC) is established in 1979 as a deposit taking non-banking financial company under section 45IA of the Reserve bank of India act 1934. Its headquarters is located at Mumbai in India. It has very diversified financial services viz. Commercial vehicle finance, life and general insurance, consumer finance, Stock broking, chit funds and mutual funds. It has played an imperative role in financial inclusion offering affordable finance to first time buyers (FTBs) and Driver turned owner (DTOs). STFC fosters a unique "relationship based" business model through a pan India network consisting 1817 branches, 820 rural centers and partnership with 500 private financiers.

STFC is listed on the BSE Ltd (stock code 511218) and NSE of India (stock code SRTRNSFIN) with market capitalization as on March 31, 2021 stood at Rs 35950 crores. Financial health is quite important for the company. Its analysis is based on two pillars viz. performance and stability. Pillar of performance shows short term health including adequate profits and cash holdings. Pillar of stability considers short term as well as long term accounting items e.g. finance, current and fixed assets etc. Basically, stability ensures timely payment of liabilities and providing solvency to the company. Here, it becomes crucial to mention that these both pillars are inter-related to each other because without finance and assets, profits cannot be made and profits help in

generation of finance and financial assets of the company.

Shriram Transport Finance Company (STFC) was incorporated in 1979 as a deposit taking NBFC under section 45IA of RBI Act 1934. With time it has expanded its operations as a conglomerate institution offering financing of commercial vehicle and consumer needs, selling and distribution of financial products like insurance policy, units of mutual funds, investment in stock market, chit funds and many more. The niche presence in the company is financing small truck owners (STOs) makes it India's largest player in commercial vehicle finance. With time, it expanded product portfolio includes construction related equipment, three wheelers, small transport vehicles and passenger vehicles etc. so its operation and product converges have been increasing with time but it has also faced increasing competition, especially after the entrance of so many private companies. Appreciable growth in EBIT, net worth, total assets are remarkable but unexpected decline in certain items like -85.89 percent reduction in current assets in FY 2020-21 complicates the performance scenario of the company. Hence, detailed analysis of the financial performance of STFC is necessary to form a definite conclusion regarding its financial health.

REVIEW OF LITERATURE

S. Nadarajan and G. Sreekanth (2016) in his paper analyzed the "Financial health of Muthoot finance limited" analyzed the financial health of Muthoot finance Ltd. using Altman 'Z' score analysis which is a combination of Liquidity, leverage and Profitability ratios. It is an indicator to check the corporate performance to predict bankruptcy. Secondary source of data has used from 2004-05 to 2013-14. Data has collected from company's website. N. Gopal Samy and Dr M. Nandhini (2017) in his paper 'A study of financial performance of selected banking financial companies in India' empirically analyzed the leverage based on the financial ratios of five NBFCs. The secondary source of data is used from 2013-17. Various ratios like current ratio, working capital turnover ratio, inventory ratio, debtor turnover ratio have been used to examine the financial situation of different NBFCs like India bulls, Reliance Capital, Tata capital, SCB prime and Birla Mani. Honey jain, Tanmayee Parbat and Rohan benhal (2014) in his study 'Analysis of growth prospective of NBFCs in India' focused upon the role of NBFCs in channelizing financial resources into capital formation. It ensures economic growth along with credit needs in the economy. They emphasized more on evolution, expansion and development of NBFCs. The structure of NBFC is more flexible than banks by fulfilling credit gaps. Mangi lal Meena (2019) in his paper 'Economic growth trend of non-banking financial institutions (NBFI) in India' emphasized the role of NBFCs as an intermediaries particularly

developing economies like India which enables to finance infrastructure. It helps by facilitating the flow of credit to end customers in transportation and other unorganized sectors. Kshetrimayum (2014) Ranjan in his study 'Growth and development of non-banking financial companies in India' explained that the supplementary role of NBFCs along with organized banking sector, giving credit to the unorganized sector and small borrowers. This paper also focuses the evolution of NBFCs, regulating authorities and supervision of NBFCs by making certain policies which help to flourish and care for its customers.

OBJECTIVES OF THE STUDY

This study has following objectives-

- To measure the current financial health of the STFC.
- To conduct trend analysis of the financial health of the company.
- To compare financial performance in pre and post COVID scenario.

HYPOTHESIS OF THE STUDY

H₀: COVID-19 does not have a substantial impact on financial performance of the STFC.

H₁: COVID-19 have a substantial impact on financial performance of the STFC.

RESEARCH METHODOLOGY

Secondary source of data has been used for this study. The period is covered from 2011-12 to 2021-22. Data has been collected from the annual financial statement of STFC Ltd. Altman Z score has used to measure the financial health which is combination of various accounting ratios (Liquidity, leverage and profitability) which indicates the performance of corporate to ascertaining solvency. The formula has been used to evaluate the Z score analysis using Altman Z as follows.

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$$

"Z" score shows the combination of X₁ to X₅ in which variables are measured in percentage forms of relative measurement. Variables included in Altman Z score are explained as follows:

Working capital to Total Assets(X₁)

This ratio indicates short-term liquidity position of the company as it compares the difference of current assets and current liabilities i.e. working capital to the total assets of the company. This calculation is mainly used by investors to determine operational efficiency of a company's operation and management.

Retained earnings to Total assets Ratio (X₂)

This financial ratio is crucial to measure profitability of a company as it compares percentage of a company profit kept in form of retained earnings to

total assets. It is part of general profitability ratio and shows short-term efficiency of the company.

EBIT to Total assets or Basic earning power Ratio(X_3)

Basic earning power (BEP) ratio is a profitability ratio which is a proportion of company's earnings before interest and tax with respect to the total assets of the company. Higher value of the EBIT to total assets ratio indicates effective return of the company generated by using its assets.

Market value of equity to Total liabilities ratio(X_4)

Ratio between market value of self-owned capital and total liabilities represents the long-term financial position of the company. In this ratio, proportionate value of equity capital of the company and external liabilities e.g. borrowings, bills payables etc. is

calculated to judge long term sustainability of the company.

Net operating revenue to Total assets (X_5)

This ratio is important to decide the efficiency of the company to generate enough operating revenue for the company with reference to its total assets. For this purpose, ratio of net operating revenue and total assets is calculated to determine the operational efficiency of the company.

Financial health of the company is determined on the basis of situation of Z score. If the score is 3.0 and above then it is too healthy zone, if score is between 1.8 to 3.0 means it is healthy zone but score below 1.8 shows an unhealthy zone or distress zone. Following figure shows the different zones on the basis of Z score-

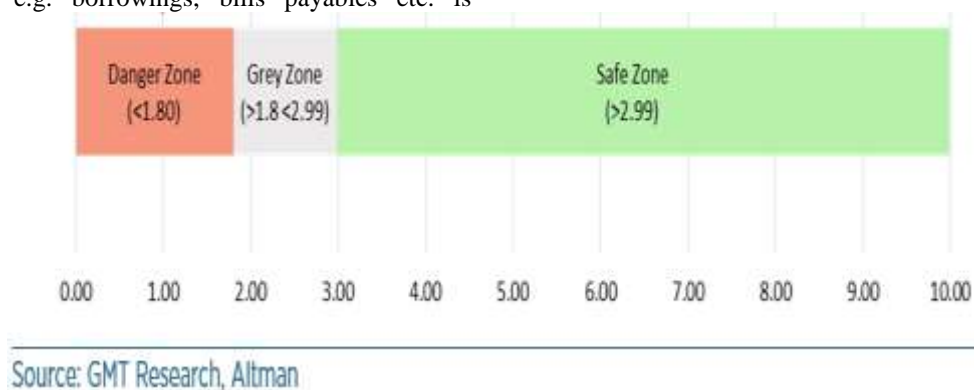


Fig. 1 shows different zones of financial health on the basis of Z score

MEASUREMENT OF FINANCIAL HEALTH

Edward Altman formulated the following table to classify financial position of the company is sound or bankrupt. The financial health of Shriram Transport Finance Company Ltd. (STFC) is to be studied by

considering working capital to total assets ratio (X_1), retained earnings to total assets ratio (X_2), EBIT to total assets ratio (X_3), market value of equity to total liabilities (X_4) and net operating revenue to total assets ratio (X_5).

Table 1: Working capital to Total assets Ratio (X_1) (figures are in ₹ Cr.)

S.No.	Year	Current Assets	Current Liabilities	Working Capital	Total assets	WC/TA	WC/TA(1.2)
1	2011-12	19129.44	11892.41	7237.03	35777.48	0.20227892	0.242734704
2	2012-13	23845.26	15777.7	8067.56	44833.23	0.17994599	0.215935189
3	2013-14	25992.57	15981.66	10010.91	49225.7	0.20336755	0.24404106
4	2014-15	26939.7	15960.58	10979.12	59327.15	0.18506063	0.222072761
5	2015-16	23278.3	23533.29	-254.99	67963.3	-0.00375188	-0.004502253
6	2016-17	25083.09	24203.1	879.99	74410.31	0.01182618	0.014191421
7	2017-18	96931.29	875.13	96056.16	97245.05	0.98777429	1.185329145
8	2018-19	104819.05	38425.38	66393.67	105292.48	0.63056422	0.756677058
9	2019-20	113158.6	43894.7	69263.9	114128.64	0.60689324	0.728271887
10	2020-21	128219.8	46851.63	81368.17	129678.86	0.62745902	0.75295082
11	2021-22	140280.34	48054.7	92225.64	142106.09	0.64899147	0.778789762

Source: moneycontrol.com

The working capital of STFC has been increasing from 7237.03 in 2011-12 to 92225.64 Cr. in 2021-22

whereas total asset is also increasing from ₹35777.48 Cr. to ₹142106.09 Cr. during 2011-12 to 2021-22.

The working capital was decreasing from 2017-18 to 2019-20 but there was a sharp increase in 2020-21 and negative figure of 2015-16 shows shortage of

working capital i.e. ₹-259.99 Cr. The weighted ratio is varying from 0.2427347 to 0.778789762.

Table 2: Retained earnings to Total assets Ratio (X_2) (figures are in ₹ Cr.)

S.No	Year	Retained Earnings	Total Assets	Retained earning	Weighted(1.4)
1	2011-12	5765.99	35777.48	0.161162553	0.225627574
2	2012-13	6967.85	44833.23	0.155417087	0.217583922
3	2013-14	8046.31	49225.7	0.163457503	0.228840504
4	2014-15	9011.06	59327.15	0.151887626	0.212642677
5	2015-16	9948.58	67963.3	0.14638165	0.20493431
6	2016-17	11075.32	74410.31	0.148841202	0.208377683
7	2017-18	12343.41	97245.05	0.126930985	0.177703379
8	2018-19	15609.38	105292.48	0.148247814	0.20754694
9	2019-20	17778.28	114128.64	0.155774046	0.218083664
10	2020-21	21315.31	129678.86	0.164369967	0.230117954
11	2021-22	25661.67	142106.09	0.180581072	0.2528135

Source: moneycontrol.com

The retained earnings of STFC is almost doubled from ₹ 5765.99 Cr. in 2011-12 to ₹ 25661.67 Cr. in 2021-22 whereas total asset is also increasing from ₹ 35777.48 Cr. to ₹ 142106.09 Cr. during 2011-12 to

2021-22. The weighted ratio is showing almost declining trend from 0.225627574 in 2011-12 to 0.177703379 in 2017-18 but it recovered afterwards to 0.2528135 in 2021-22.

Table 3: Earnings before interest and taxes (EBIT) to Total assets Ratio(X_3) (figures are in ₹ Cr.)

S.No	Year	EBIT	Total Assets	EBIT/Total Assets	Weightage(3.3)
1	2011-12	4342.12	35777.48	0.121364613	0.400503222
2	2012-13	4886.53	44833.23	0.108993485	0.359678502
3	2013-14	5760.56	49225.7	0.117023425	0.386177302
4	2014-15	6232.39	59327.15	0.105051229	0.346669055
5	2015-16	6839.23	67963.3	0.100631223	0.332083036
6	2016-17	7111.325	74410.31	0.095569082	0.31537797
7	2017-18	9174.15	97245.05	0.094340535	0.311323764
8	2018-19	11289.53	105292.48	0.107220668	0.353828203
9	2019-20	11708.93	114128.674	0.102594112	0.338560571
10	2020-21	12332.27	129678.86	0.095098538	0.313825176
11	2021-22	13283	142106.09	0.093472419	0.308458983

Source: moneycontrol.com

The EBIT of STFC is tremendously increasing ₹ 4342.12 Cr. in 2011-12 to ₹ 13283 Cr. in 2021-22 whereas total asset is also increasing from ₹ 35777.48 Cr. to ₹ 142106.09 Cr. during the study period. The ratio is declining from 0.121364613 to

0.093472419 and that weighted average is also decreasing trend from 0.400503222 to 0.308458983 from 2011-12 to 2021-22. This decreasing trend of this ratio is because EBIT has been increased less in comparison of total assets in the study period.

Table 4: Market value of equity to Total Liability Ratio (X₄) (figures are in ₹ Cr.)

S.No.	Year	Equity	Total Liability	Equity/ TL	Weighted(0.6)
1	2011-12	13200	29785.16	0.443173715	0.265904229
2	2012-13	15770	37638.48	0.418986101	0.251391661
3	2013-14	17043	40952.48	0.416165273	0.249699164
4	2014-15	25280	50089.19	0.504699717	0.30281983
5	2015-16	21625	57809.1	0.374076054	0.224445632
6	2016-17	24458	63108.08	0.387557346	0.232534408
7	2017-18	32662	75898.08	0.430340267	0.25820416
8	2018-19	28982	89456.2	0.32397978	0.194387868
9	2019-20	14770	96123.48	0.153656526	0.092193916
10	2020-21	35950	108110.49	0.332530174	0.199518104
11	2021-22	30677	116173.2	0.264062624	0.158437574

Source: moneycontrol.com

The market value of equity of STFC has been increasing from ₹ 13200 Cr. to ₹ 30677 Cr. in between 2011-12 to 2021-22. The debt is almost fifth time from ₹ 29785.16 Cr. to ₹ 116173.2 Cr. In the study period. The ratio is decreasing from 0.443173715 to 0.264062624 and weighted ratio is

also decreased from 0.265904229 to 0.158437574 in the study period. This decreasing trend of this ratio is because market value of equity of STFC has been increased less in comparison of total liabilities in the study period.

Table 5: Net Operating Ratio to Total Assets Ratio (X₅) (figures are in ₹ Cr.)

S.No.	Years	NOR	Total Assets	NOR/Total Assets	Weighted (0.999)
1	2011-12	5889.17	35777.48	0.1646055	0.164440895
2	2012-13	6558.13	44833.23	0.14627833	0.146132051
3	2013-14	7880.09	49225.7	0.160080811	0.159920731
4	2014-15	8636.95	59327.15	0.145581745	0.145436163
5	2015-16	10241.56	67963.3	0.150692506	0.150541814
6	2016-17	10828.75	74410.31	0.145527549	0.145382021
7	2017-18	12201.66	97245.05	0.125473327	0.125347854
8	2018-19	15522.44	105292.48	0.147422114	0.147274692
9	2019-20	16562.36	114128.64	0.145120103	0.144974983
10	2020-21	17420.45	129678.86	0.134335311	0.134200976
11	2021-22	19255	142106.09	0.13549736	0.135361862

Source: moneycontrol.com

The net operating revenue of STFC is increasing ₹ 5885.89 Cr. in 2011-12 to ₹ 19255 in 2021-22, which is quite important. During this period the assets of the company also been increasing from ₹ 35777.48 Cr. to ₹ 142106.09 Cr. but Its ratio is showing decreasing

from 0.1646055 to 0.134349736 and weighted score also declines from 0.164349 to 0.135361862. The reason behind this is more growth of total assets in comparison of NOR during this study period.

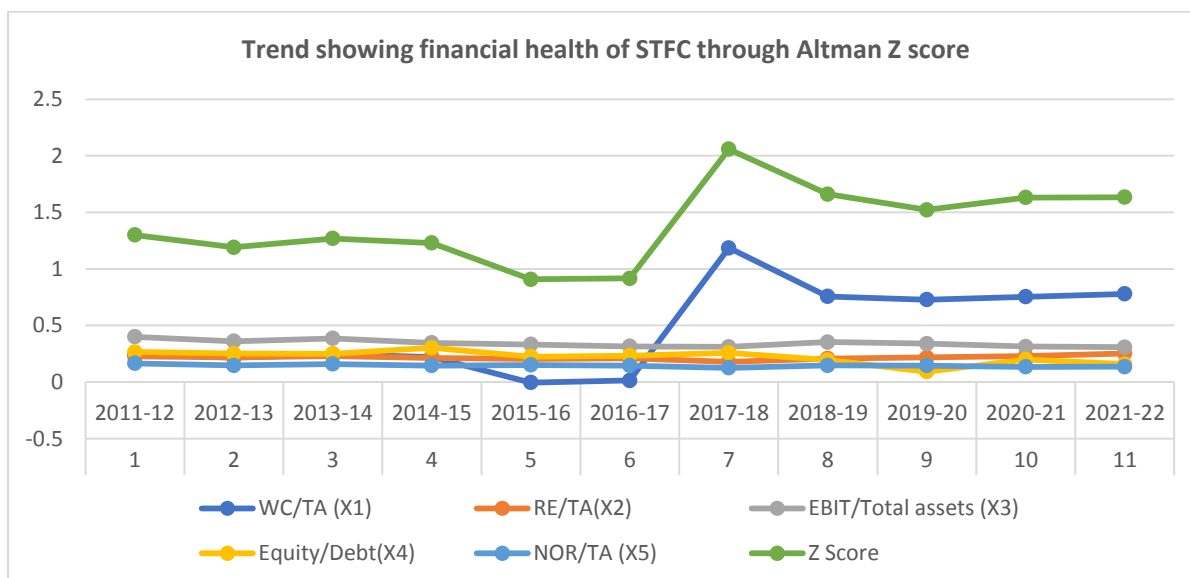
Table 6: Weighted Score on Financial Health of STFC Ltd during study period

S.No.	Years	WC/TA (X1)	RE/TA(X2)	EBIT/Total assets (X3)	Equity/Debt(X4)	NOR/TA (X5)	Z Score
1	2011-12	0.242734704	0.225627574	0.400503222	0.265904229	0.164440895	1.299210622
2	2012-13	0.215935189	0.217583922	0.359678502	0.251391661	0.146132051	1.190721325
3	2013-14	0.24404106	0.228840504	0.386177302	0.249699164	0.159920731	1.26867876
4	2014-15	0.222072761	0.212642677	0.346669055	0.30281983	0.145436163	1.229640485
5	2015-16	-0.00450225	0.20493431	0.332083036	0.224445632	0.150541814	0.907502539
6	2016-17	0.014191421	0.208377683	0.31537797	0.232534408	0.145382021	0.915863502
7	2017-18	1.185329145	0.177703379	0.311323764	0.25820416	0.125347854	2.057908303
8	2018-19	0.756677058	0.20754694	0.353828203	0.194387868	0.147274692	1.659714761
9	2019-20	0.728271887	0.218083664	0.338560571	0.092193916	0.144974983	1.52208502
10	2020-21	0.75295082	0.230117954	0.313825176	0.199518104	0.134200976	1.63061303
11	2021-22	0.778789762	0.2528135	0.308458983	0.158437574	0.135361862	1.633861681

Source: moneycontrol.com

During the period of 2011-12 to 2014-15, the ‘Z’ score of Shriram Transport Finance Company Ltd. (STFC) is almost constant (around 1.2) but it falls below 1.0 in 2015-16 and 2016-17. Biggest matter of concern is that in the study period Z score is in distress zone except 2017-18 with Z score of 2.057908303. From 2019-20, an upward trend in Z

score is showing efficient and constant efforts of the company which managed to increase Z score during COVID-19 situation is really appreciable but improvement and growth in company’s operation must be required to bring it in healthy zone and further too healthy zone. Following graph shows the trend analysis of Z score related with STFC-



FINDINGS AND CONCLUSION

The working capital to total assets ratio has fluctuated during the study period and in year 2015-16 it also came negative. The retained earnings to total assets ratio is showing decreasing a constant trend with score is swinging around 2. The downward trend of EBIT to total assets ratio and market value of equity to total liabilities from 2011-12 to 2021-22 are biggest concerns for the company. At last, ratio of net operating revenue to total assets has shown variability in its trend. The Z score of Shriram transport company Ltd is on an average of 1.25 from 2011-12 to 2014-15 but in further two years, it falls below 1 which shows pathetic situation of the company which. It came to the “Health Zone” with Z score of more than 1.8 in 2017-18 but overall, it is still below 3.0 score so we can say that with time company is performing well to enhance soundness of

its performance but it is below the mark of ‘Too Healthy Zone’. Hence, it is right time to analyse the reasons of fluctuating trend of Z score in order to fill the gaps in performance of the company.

SUGGESTIONS

Working capital to total assets ratio can be improved by either increasing current assets or current liabilities giving net effect of increase in working capital of the company. EBIT can be improved by increasing net profit of the company through more efficient operation and cost saving strategies while net operating revenue to total assets ratio can make favorable by increasing net operating revenue of the company and increase in EBIT can give better results of EBIT/total assets ratio. Optimum balance of market value of equity to total liabilities will be helpful for long term survival of the company. At last, this study asserts that formula for measurement

of Z score may require customisation because for banking companies/NBFCs, loans and advances are treated as assets and more assets in X_1 , X_2 and X_5 give unfavourable results in respective ratios. Therefore, in order to overcome this problem, either assets should be considered without loans and advances or more weightage should be given to these ratios for the sake of presenting true financial conditions of such companies.

REFERENCES

1. Altman, E., 1968. *Financial ratios, discriminant analysis and the prediction of corporate bankruptcy*. *J. Finance*, pp: 589-609.
2. Jain, H. Tanmayee parbat, Rohan benhal (2021), *Analysis of growth prospects of non-banking financial companies in India*, *journal of emerging technologies and innovative research (JETIR)* ISSN:2349-5162
3. Kantawala, Amita S. (1997). *Financial Performance of Non-Banking Finance Companies in India*. *The Indian Economic Journal*, Vol. 49, No.1, 86-92
4. Kaushal, H.R. (2016). *Impact of Non-Banking Financial Companies (NBFCs) in Indian Economy Growth*. *EPRA International Journal of Economic and Business Review*. 4 (3), 90-95.
5. Kshetrimayum Ranjan Singh (2014), "Growth and development of nonbanking financial companies in India", *A Journal of Radix International Educational and Research Consortium*, Volume No. 03, Issue:10, ISSN:2250-3994
6. Masur A. Mulla (2002), "Use of 'Z' Score Analysis for Evaluation of Financial Health of Textile Mills-A Case Study", *Abhigyan*, 19(4), January-March, pp.37- 41.
7. Meena, M.L. (2019), *Economy growth trend of non-banking financial institution (NBFI) in India*, *Journal of commerce, economics and computer science*, ISSN: 2395-7069, Volume 05, No.3, July-September, 2019, pp 119-122 volume 8, issue 8 pp33-39.
8. Nandhini Muniappan & Gopal Swamy (2019), *Performance of Non-banking financial institutions in India*, *International Journal of Business and Administration Research Review*, Volume 1, issue 23, page no 4-17
9. Paul, P. (2011). *Financial Performance Evaluation - A Comparative Study of Some selected NBFCs*. *Indian journal of finance*, 5 (5) pp.13-22
10. Vadde, S. (2011). *Performance of non-banking financial companies in India – An evaluation*. *Journal of Arts Science & Commerce*, 2 (1), 123-131
11. <https://www.gmtresearch.com/en/accounting-ratio/altman-z-score/>
12. www.moneycontrol.com
13. www.rbi.org
14. www.STFC.com