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MEASURING EFFICIENCY IN ASSETS AND LIABILITIES MANAGEMENT PRACTICES IN DEPOSIT TAKING NON-BANKING FINANCIAL COMPANIES IN INDIA: A CAMEL APPROACH

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ABSTRACT

ALM technique is a strategic financial tool particularly focused on management of financial risks such as liquidity and interest rate risks only. In general, mismatch between assets and liabilities poses high risk (financial or non-financial risk) to the company's capital. Therefore, company's can protect their capital from various risks through proper management of assets and liabilities. Present study applied CAMEL technique to measure the efficiency of ALM practices of selected NBFCs-D in Tamilnadu for the period of 2011-2020. The study revealed that, SRTFL reported strongest level of financial soundness in the aspects of capital adequacy, management efficiency and earning efficiency whereas satisfactory level in liquidity and moderate/fair level in assets quality. Similarly, SRCUFL reported strong level in capital adequacy and earning efficiency, satisfactory level in assets quality and liquidity and fair level in management efficiency. Similarly, SFL has shown strongest level of performance in asset quality and earning efficiency, satisfactory in management efficiency, fair level in capital adequacy and marginal/poor level in liquidity. Similarly, SKFL reported satisfactory level in assets quality, fair level in capital adequacy and earning efficiency, marginal level in management efficiency and unsatisfactory/worst level in liquidity. Finally, NLOF has reported unsatisfactory/worst level of performance in all parameters except capital adequacy. This indicates high risk level/default level of the NLOFL during the study period.

INTRODUCTION

ALM technique is a strategic financial tool particularly focused on management of financial risks such as liquidity and interest rate risks only. In general, mismatch between assets and liabilities poses high risk (financial or non-financial risk) to the company's capital. Therefore, companies can protect their capital from various risks through proper management of assets and liabilities. At the beginning ALM technique (traditionally) aimed at stabilization of short-term profits, mitigation of liquidity and interest rates risk of home currency particularly in static portfolio analysis, but focus extended to long term earnings, economic value, exchange rate risk, capital management and risks associated with all financial instruments in dynamic portfolio scenario. As result, ALM technique gains dynamism in risk management practices. Earlier to ALM, treasury department monitored only cash clearance and short-term funding and ignored long term aspects which affected the firm solvency position. In ALM practices both type, cost and maturity of assets and liabilities is included.

REVIEW OF LITERATURE

AL-Najjar and Assous (2021) have focused on rating of 11 commercial banking operating in Saudi for the period of 2014-2018 through using CAMEL rating system. The study also applied regression tool between ratings and deposits of selected

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banks. The study found that, best regression model has an adjusted R^2 of 73.4% and a standard error of around 0.58. (Nguyen, Nguyen, & Pham, 2020) investigated the effect of CAMEL components on the financial performance of 31 commercial banks in Vietnam for the period of 2013-18. The study deployed three econometric models are built using four CAMEL's crucial indicators as independent variables (capital adequacy, asset quality, management effectiveness and liquidity) and (ROA), (ROE), and (NIM) as proxies for commercial banks' financial performance – dependent variables. The statistical results of the study have shown that a better fit of the fixed effects model (FEM) in terms of the research methodology compared to the ordinary least squares (OLS) and random effects model (REM). The study found that capital adequacy, asset quality, liquidity and management efficiency significantly affected the performance of commercial banks in Vietnam. (Badrul Munir & Ahmad Bustamam, 2017) have evaluated the profitability of 19 banks of Malaysia and Indonesia during 201-2015 by using the technique of CAMEL. This study is comparative study between traditional and Islamic banking systems in selected countries. The study revealed that CAMEL analysis is significant tool in measuring performance of financial institutions. The study found significant variations in management, earnings and liquidity between conventional banks of both countries and significant variations in only management and liquidity between Islamic banks of both countries. For the purpose of study, he used regression analysis technique and T-test. (Umarani & Jayanthi, 2015) has analyzed the asset liability management effectiveness in selected commercial banks during 2003-12 through using CAMEL technique. The study found that ALM practices by banking sector are significantly different one another. Some Indian banks risk management capacity is very lower than foreign banks during the study period. However, the study found that banking sector is moving towards effective implementation of ALM through sophistical innovative techniques such as duration gap, simulation and Value at Risk. (Kaur, 2016) has evaluated performance of two leading gold loan non-banking financial services namely Manappuram and Muthoot finance during 2009-2014 through using CAMEL. In the study he evaluated the performance in terms of capital adequacy (capital adequacy, debt-equity ratio, total advances to total assets ratio), asset quality (Gross NPA to Net Advances, net NPA to Net advances and asset utilization ratio), management efficiency(profit per branch and per employee, business per employee and RONW), earnings quality (ROA, Interest income to total assets, Non-interest income to total assets)and liquidity(quick assets) The study found in line with the performance of both NBFCs in all selected parameters, except, in two cases i.e. Manappuram has shown superior performance in case of capital adequacy whereas Muthoot finance Ltd has shown leadership in management efficiency during the study period.

CAMEL-CONCEPTUAL FRAMEWORK

CAMELS mechanism is a risk measurement rating system of financial institutions prepared by regulatory authorizes based on monitoring of financial statements timely. CAMELS rating system monitor the operational and financial functions of financial institutions and assess the risk exposure of them. CAMELS rating system works as early warning system of disclosing financial distress and helps to take corrective steps. A CAMEL rating is a composite rating of different components of the framework. CAMELS rating is measured in the range between 1-5 where 1 indicates best and 5 indicates worst risk management efficiency and high probability of failure of financial institution.

Table 1. Camel Rating Methodology for the Present Study (NBFCS-D)

Criteria (Rating)	**Strong (1)**	**Satisfactory (2)**	**Fair (3)**	**Marginal (4)**	**Unsatisfactory (5)**
Capital adequacy (CRAR %)	>20	>15 but <18	=15	>10& <15	<10
Assets Quality (NNPA Ratio %)	≤1	>1 but < 2	>2 but < 3	>3but <5	>5
Management Efficiency(AUM)	Highest	High	Moderate	Low	Lowest
Earnings Efficiency (ROE)	≥15	>10& <15	≥10 & < 05	> 5& <10	< 5
Liquidity (Acid Ratio)	>0.50 & <0.40	>0.40 & <0.3	>0.30 &< 0.20	>0.20&<0.10	<0.10

Source: Standards from RBI and other institutions and general standards

Composite Camels' Ratings and Interpretation

Rating Scale	**Rating Analysis**	**Interpretation**
1	Strong	Sound in all respects, no supervisory responses required
2	Satisfactory	Fundamentally sound with modest correctable weakness with limited supervisory response
3	Fair(Watch Category)	Combination of weaknesses if not redirected will become severe. Watch category. Requires more than special supervision
4	Marginal (some risk of failure)	Immoderate weakness unless properly addressed could impair future viability of the bank. Needs close supervision
5	Unsatisfactory (High degree of failure)	High risk of failure in the near term. Under constant supervision/cease and desist order

Sources: CAMELs Framework 2020, Bank for International Settlements, BASEL Committee on Banking Supervision.

RESEARCH GAP

It is revealed from the above literature that many research studies on ALM practices is observed in commercial banks, co-operative banks, gold loans NBFCs. However, no study is observed on ALM practices in deposit taking NBFCs particularly in Tamilnadu State where role of deposit taking NBFCs is highly significant. Therefore, present study fulfills this research gap.

RESEARCH PROBLEMS

The mismatch between assets and liabilities causes the financial risks to financial institutions. However, academic and industrial research literature in the aspects is plenty in case of banking sector but very scarcity in non-banking financial sector. There is much demand for research activities in this thrust area particularly deposit taking NBFCs. Present study full fills this gap.

OBJECTIVES OF THE PRESENT STUDY

- To study the Capital Adequacy position of the selected NBFCs-D in Tamilnadu
- To measure the Assets Quality of the selected NBFCs-D in Tamilnadu
- To examine the Management Efficiency of the selected NBFCs-D in Tamilnadu
- To analyze the Earning efficiency of the selected NBFCs-D in Tamilnadu
- To study the Liquidity position of the selected NBFCs-D in Tamilnadu.

HYPOTHESIS FORMULATED

- Ho_1: There is no significant difference in capital adequacy within and between selected NBFCs-D in Tamilnadu during the study period.
- H_1: There is significant difference in capital adequacy within and between selected NBFCs-D in Tamilnadu during the study period
- Ho_2: There is no significant difference in Asset Quality (Net non-performing assets) within and between selected NBFCs-D in Tamilnadu during the study period.
- H_2: There is significant difference in Assets Quality (Net non-performing assets) within and between selected NBFCs-D in Tamilnadu during the study period.

RESEARCH METHODLOGY

Present study is purely based on secondary data collected from the annual reports of selected NBFCs-D operating in Tamilnadu State. The present study covers the ten years study period 2011-2020. The selected NBFCs are to five deposits taking NBFCs in Tamilnadu namely, Sri Ram Transport Finance Ltd, Sri Ram City Union Ltd, Shakti Finance Ltd, Sundaram Finance Ltd and New link Overseas Finance Ltd. The study employed CAMEL technique & Ratios to measure the effective of Assets and liabilities management practices of selected NBFCs-D during the study period.

DATA ANALYSIS AND INTERPRETATION

Table 2. Capital to Risk (Weighted) Assets Ratio (CRAR) of selected NBFCs-D in Tamilnadu during 2011-2020 (%)

YEARS	SRTFL	SRCUFL	SFL	SKFL	NLOFL
2019-20	21.99	27.69	18.37	21.92	6.89
2018-19	20.27	22.84	19.43	22.35	17.30
2017-18	17.38	21.37	18.03	17.22	18.85
2016-17	16.63	23.88	18.45	19.73	20.52
2015-16	17.56	26.14	18.43	19.42	20.61
2014-15	20.52	29.03	21.41	18.04	21.41
2013-14	23.39	25.77	18.18	21.55	22.48
2012-13	20.74	18.95	17.85	14.5	22.57
2011-12	22.26	17.40	16.33	16.2	22.20
2010-11	24.85	20.52	16.24	15.60	21.15
AVG	20.55	23.35	18.27	18.65	19.39

Source: Company Annual Reports (2011-2020)

C-Capital Adequacy: Capital refers to owner's contribution to the business which is a base for carrying business transaction at initial stage. Therefore, adequate capital is a tool for protection of deposits/creditors funds and an indication of financial soundness of organization to absorb the unexpected losses. Adequate capital ensures firms ability to absorb unexpected shocks in business and market. Therefore, increase in capital levels is an indication of increasing protection of deposits funds and loss absorption capacity of financial institutions. Capital adequacy of financial institutions is examined through ratios of Capital Risk Adequacy Ratio and Debt to Equity Ratio.

Capital To Risk Weighted Assets Ratio: Capital to Risk Weighted Assets Ratio is a tool that indicates the loss absorption capacity of the NBFCs-D with available capital. Capital adequacy ratio measures the proportion of capital availability against its current financial obligations and risk associated with these assets. It is also a sign for absorption capacity of business losses without insolvency. In NBFCs-D assets are in the form of advances, loans and investments which are subject to risks of default/credit risk and market risk. In this case, company allocate certain portion of profits to meet these losses, however, in some cases bank operating profits may inadequate to meet this losses that rise the situation to compensate these losses out of its capital which is an indication of severe financial threat to the owner's equity (equity plus reserves). Risk assets excluded cash in hand, cash at bank and investment in approved securities. CRAR use by NBFCs-D with aim of protect the depositors and to promote stability and efficiency in NBFCs-D. Increase in CRAR indicates increased loss absorption capacity and good financial health, in contrast, decrease in CRAR is an indication of decrease in loss absorption capacity and financial ill of the NBFCs-D. Therefore, higher CRAR ratio is preferable than lower. In the present study broad indicator of capital adequacy (CRAR) is calculated and presented and rest of two is not disclosed due to data constraint or data inadequacy. The Capital to Risk Weighted Assets Ratio of selected deposit taking NBFCs-D is presented in below table

Hypothesis Testing

Ho: There is no significant difference in capital adequacy within and between selected NBFCs-D in Tamilnadu during the study period.

H_1: There is significant difference in capital adequacy within and between selected NBFCs-D in Tamilnadu during the study period

Statistical Results: ANOVA Single Factor Analysis.

ANOVA Results (F-Test)

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F critic*
Between NBFCs-D	167.4654	4	41.86636	3.882113	0.008589	2.578739
Within NBFCs-D	485.2991	45	10.78442			
Total	652.7645	49				

Source: SPSS

The statistical analysis reveals that, calculated F test value is 3.882113 which is higher than the table value of 2.578739. Similarly, P-Value is 0.008589 which is lower than the significant confidence level of 0.05. This indicates that, the statistical analysis recommends to rejects null hypothesis and accepts alternative hypothesis "There is significant difference in capital adequacy of selected NBFCs-D in Tamilnadu during the study period

Table 2 Exhibits the Capital to Risk Weighted Assets Ratio of selected NBFC-D in Tamilnadu during 2011-2020 The study observed that, Capital to Risk Weighted Assets Ratio (CRAR) of Sri Ram Transport Finance Ltd (SRTFL) was 24.85 percent in 2010-11 which was double to RBI norms of 12 percent indicates strong loss absorption capacity. Thereafter, CRAR slightly decreased to 22.26 percent in 2011-12 and 20.74 percent in 2012-13, but maintained higher than RBI norms of 15 percent. In contrast, it increased to 23.39 percent in 2013-14. Thereafter, in next three years CRAR gradually decreased to 20.52 percent in 2014-15, 17.56 percent in 2015-16 and 16.63 percent in 2016-17 which is also higher to norms. In contrast, SRCUF reported uptrend in CRAR in next three years such as 17.38 percent in 2017-18, 20.27 percent in 2018-19 and 21.99 percent in 2019-20. The SRTFL reported average CRAR of 20.55 percent which is good sign of sufficiency capital adequacy. This indicates that, SRTFL met capital adequacy norms during the entire study period, moreover, its ratio is significantly higher than regulatory norms which indicates high loss absorption capacity of the company. Similarly, CRAR of Sri Ram City Union Finance Ltd (SRCUFL) was 20.52 percent in 2010-11 which is 8.52 percent higher than RBI norms (12 percent). Thereafter, CRAR fell to 17.40 percent in 2011-12 but higher than RBI norms of 15 percent. Thereafter, in next three years CRAR gradually raised to 18.95 percent in 2012-13, 25.77 percent in 2013-14 and grew to the very strongest level of 29.03 percent in 2014-15 which was highest CRAR during entire period and among all selected NBFCs-D in the study. This is mainly attributable to 42 percent increase in owner's equity backed by company reserves and surplus. In contrast, SRCUFL reported down trend in CRAR in next three years such as 26.14 percent in 2015-16, 23.88 percent in 2016-17 and 21.37 percent in 2017-18. Thereafter, CRAR again rose to 27.69 percent in the 2019-20. The average CRAR of the SRCUFL is 23.35 percent during the study period. This indicates that, SRCUFL met capital adequacy norms during the entire study period, moreover, its ratio is substantially higher than regulatory norms which indicate high loss absorption capacity of the company.

The Sundaram Finance Ltd (SFL) Company reported CRAR 16.24 percent and 16.33 percent in fir two years which was higher than RBI norms. Thereafter, in 2012-13 SFL reported CRAR of 17.85 percent in 2012-13 and 18.18 percent in 2013-14 and 21.41 percent in 2014-15 which were higher RBI norms. Similarly, during the period of 2015-18 company's CRAR stood in the range of 18-18.50 percent which was higher than RBI norms. In last two years also SFL reported CRAR of 19.43 percent and 18.37 percent respectively which was higher than RBI norms. In overall, the average CRAR of SFL was 18.27 percent which indicates good capital adequacy level during the study period.

Similarly, CRAR of Sri Shakti Finance Ltd (SRTFL) was 15.60 percent in 2010-11 and 16.20 percent in 2011-12 which were higher to RBI norms (12 & 15 percent) which indicates good loss absorption capacity. Thereafter, CRAR reported 14.5 percent CRAR in 2012-13 which was marginally lower to RBI norms (15 percent). This is mainly attributable to the huge increase Risk weighted Assets of non-current investments (nearly half rate increase). This indicates weak loss absorption capacity in this year. Thereafter, company improved its CRAR to substantial level and reported 21.55 percent in 2013-14, 18.04 percent in 2014-15 and 19.42 percent in 2015-16 and 19.73 percent in 2016-17. Thereafter, SRCUF reported decreased CRAR of 17.22 percent in 2017-18 and again rose to 22.35 percent in 2018-19 and 21.92 percent in 2019-20. The SKFL reported average CRAR of 18.65 percent which is good sign of adequate capital availability. The study reveals that, SKFL met capital adequacy norms during the entire study period, moreover, its ratio is higher than regulatory norms which indicates adequate loss absorption capacity of the company.The study also observed that, New Link Overseas Finance Ltd (NLOFL) reported continuous uptrend in CRAR in first three year such as 21.15 percent in 2010-11, 22.20 percent in 2011-12 and 22.57 percent in 2012-13. In contrast, company's CRAR continuously fallen from 22.48 percent in 2013-14 to 17.30 percent in 2018-19. However, it could maintain CRAR higher to RBI prescribed norms. But, in the last, NLOFL reported substantial fall in CRAR i.e. 6.89 percent which is less than half of RBI norm (15 percent) due to significant fall in company's net worth from Rs 12.23 Cr in 2019 to RS 4.43 Cr in 2020 (Three fold fall), deterioration in quality of assets, small scale operations high influence of Covid 19 on profitability. However, this indicates worst capital adequacy position of NLOFL and calls for immediate financial action towards the provision of security to the lenders and deposits. RBI also directed the company not to raise fresh deposits until capital adequacy improved. In overall, four out of five companies capital adequacy position met RBI regulations which indicate good loss absorption capacity and financial health. Only New link financial Ltd reported deterioration in capital adequacy position in the last year due to continuous losses which results in fall of in net worth.

A-Asset Quality: In CAMEL technique second parameter to assess the efficiency of ALM practices is Asset Quality. The quality analysis of the assets of non-banking financial companies is an indication of operational and financial efficiency. The quality of assets of non-banking financial companies is influenced by the credit appraisal policy, lending norms, customer risk profile, loan concentration and diversification, debt recovery system of the firm and economy of the state. The quality of NBFCs-D assets has significant impact on the revenue, cost, profit and fund-raising capacity of the firm. The deterioration of assets quality will show negative impact on the company's revenue, profits and net worth, in contrast, high quality of assets will show positive impact.

Net Non-Performing Assets to Net worth Ratio: Net non-performing assets refer an actual loss of gross non-performing assets after provision. Net non-performing assets should be 100 percent write off out of profits every year which shows adverse impact on the profitability of the company and reduce net worth of the company. Higher losses erode the company's profits and net worth. In contrast, low ratio indicates good assets quality and financial health of the business. Consequently, Net NPA to Net worth ratio is analyzed in the present study as part of asset quality measurement. This ratio is calculated as net non-performing assets by net worth multiplication with 100.

Table 3. Net NPA to Net Worth Ratio of selected NBFCs-D in Tamilnadu during 2011-2020 (%)

YEARS	SRTFL	SRCUFL	SFL	SKFL	NLOFL
2019-20	33.37	16.18	9.76	16.21	450.62
2018-19	35.66	22.73	4.53	17.06	19.78
2017-18	15.70	16.89	2.31	19.0	7.29
2016-17	14.53	8.25	2.34	16.7	16.57
2015-16	11.26	6.58	3.85	5.27	20.51
2014-15	4.10	2.60	2.39	3.77	5.34
2013-14	3.66	2.64	2.34	2.73	4.99
2012-13	3.36	4.87	2.55	1.54	5.71
2011-12	1.63	2.47	0.58	1.16	5.91
2010-11	1.52	2.46	1.22	2.14	5.54
AVG	12.48	8.57	3.19	8.56	54.23

Source: Company Annual Reports (2011-2020)

The study analyzed that, Sri Ram Transport finance limited reported Net NPA to Net worth ratio of 1.52 percent in 2010-11. Thereafter, it creased to 1.63 percent in 2011-12, 3.36 percent in 2012-13, 3.66 percent in 2013-14 and 4.10 percent in 2014-15. Thereafter, it was suddenly surged nearly by three folds increase of 11.26 in 2015-16 which trend was continued thereafter also such as 14.53 percent and 15.70 percent in 2016-17 and 2017-18 respectively. Thereafter, Net NPA to Net worth reached weakest level of 35.66 percent in 2018-19, but, in next year it was slightly improved to 33.37 percent in 2019-2020. The average Net NPA to Net worth ratio of the company stood at 12.48 percent. The study found continuous uptrend in this during the entire study period (except 2019-20). This indicates continuous negative impact of non-performing on the net worth of the firms due to the continuous increase in net and gross non-performing assets in gross and net loans and advances since beginning of the study period. Similarly, Sri Ram City Union finance limited company reported raising trend in Net NPA to Net worth ratio in first three years such as 2.46 percent in 2010-11, 2.47 percent in 2011-12 and 4.87 percent in 2012-13. In contrast, in two year this ratio was improved to 2.64 percent and 2.60 percent in 2013-14 and 2014-15 respectively. On the contrast, this was again climbed to 6.58 percent in 2015-16, 8.25 percent in 2016-17, and 16.89 percent in 2017-18 and reached to weakest level of 22.73 percent in 2018-19 and thereafter improved to 16.18 percent. The study observed mixed trend in Net NPA to Net worth ratio of SRCUFL with an average of 8.57 percent in during the study period.

On other hand, Sundaram finance limited reported Net NPA to Net worth ratio of 1.22 percent in 2010-11 which was improved to 0.58 percent in 2011-12. Thereafter, this ratio was increased to 2.55 percent in 2012-13 and marginally decreased to 2.34 percent in 2013-14. In contrast, this ratio moved up to the levels of 2.39 and 3.85 percent in 2012-13 and 2013-14 respectively. This ratio was improved in two subsequent years such as 2.34 percent and 2.31 percent in 2017-18. Thereafter, this ratio was climbed to 4.53 percent in 2018-19 and reached to weakest level of 9.76 percent in 2019-20. The study observed ups and down in Net NPA to Net worth ratio of Sundaram finance limited during the entire study period with an average of 3.19 percent which is lowest among all the selected NBFCs-D in Tamilnadu. Similarly, Shakti finance limited reported 2.14 percent in 2010-11 which was improved to 1.16 percent in 2011-12. Thereafter, this ratio was weakened in next six subsequent years to the levels such as 1.54 percent in 2012-13, 2.73 percent in 2013-14, 3.77 percent in 2014-15, 5.27 percent in 2015-16, and 16.7 percent in 2016-17 and reached weakest level of 19 percent in 2017-18. Thereafter, this ratio was improved to 17.06 and 16.21 percent in 2018-19 and 2019-20. The study witnessed weak levels in Net NPA to Net worth ratio of Shakti finance limited during the study period with an average of 8.56 percent. Similarly, New link overseas finance limited reported Net NPA ratio was 5.54 percent in 2010-11 which as raised to 5.91 percent in 2011-12. Thereafter, it improved to 5.71 percent and 4.99 percent in 2012-13 and 2013-14 respectively. This ratio was again climbed to 5.34 percent in 2014-15 and reached to weak level of 20.51 percent in 2015-16. This ratio of was improved in next two subsequent levels such as 16.57 percent in 2016-17 and 7.29 percent in 2017-18. However, again this ratio deteriorated to 19.78 percent in 2018-19. In the last year this ratio reached to abnormal level of 450.62 percent which shows net –performing assets four times higher than net worth which indicates worst position of assets quality and huge impact on net worth. The reserves and surplus of the companies fallen by 80 percent profit turned to losses as 0.35 Cr to - 6.3 Cr. This also indicates default risk level of the company to meet its bad assets even with capital. The study observed high fluctuations in Net NPA to net worth ratio with an average of 54.23 percent during the study period.

Hypothesis Testing
Ho: There is no significant difference in Asset Quality (Net non-performing assets) within and between selected NBFCs-D in Tamilnadu during the study period.
H_1: There is significant difference in Assets Quality (Net non-performing assets) within and between selected NBFCs-D in Tamilnadu during the study period.

Statistical Results: ANOVA Single Factor Analysis

ANOVA Results (F-Test)

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F critic*
Between NBFCs-D	19455082.5	4	6485028	4.843824	0.006219	2.866266
Within NBFCs-D	48197665.8	45	1338824			
Total	67652748	49				

Source: SPSS

The statistical analysis reveals that, calculated F test value is 4.843824 which is higher than the table value of 2.866266. Similarly, P-Value is 0.006219 which is lower than the significant confidence level of 0.05. This indicates that, the statistical analysis recommends to rejects null hypothesis and accept alternative hypothesis "H_1: There is significant difference in Assets Quality (Net non-performing assets) of selected NBFCs-D in Tamilnadu during the study period

M-Management Efficiency
Management efficiency is third element of CAMELS framework. Measurement of managerial efficiency through only quantitative figures is not enough due to involvement of qualitative aspects such planning, decision making, evaluation and controlling etc. The overall, results of qualitative aspects reflect in quantitative business figures. However, overall efficiency of management decisions should reflect in bottom to top line figures of the business such as income, cost and profit etc. Therefore, in present study managerial efficiency is measured through ratios of Assets under Management (AUM). AUM refers to the total market value of the financial assets such as securities, loans, advances, investment and cash and cash equivalents etc. under the management of the NBFCs-D. The size of assets under management is an indication for size of the firm and also signs for success of the management in wealth creation. It is also a tool for measuring relative competency in the industry. Assets under management is also a growth driving parameter of a company while uptrend refers to pushing factor of growth and down trend refers to pulling factor of growth. Growth in AUM on year-on-year basis indicates that management is high efficient, in contrast, fall indicates inefficiency of management and subject to increase in business risk. Therefore, in the present study, year on year growth in Assets under Management is analyzed in the below table.

Table 4. Assets under Management of selected NBFCs-D in Tamilnadu during 2011-2020 (Rs)

YEARS	SRTFL	SRCUFL	SFL	SKFL	NLOFL
2019-20	109750 (5.04)	29085 (0.59)	32612 (8.79)	1112.87 (5.43)	68.51 (-5.66)
2018-19	104482 (8.55)	28915 (5.29)	29976 (31.15)	1055.58 (2.91)	72.62 (2.53)
2017-18	96253 (0.99)	27461 (10.26)	22857 (23.02)	1025.77 (1.50)	70.83 (10.05)
2016-17	95306 (21.01)	24906 (27.23)	18580 (10.56)	1010.62 (0.42)	64.36 (4.91)
2015-16	78761 (8.25)	19576 (17.22)	16806 (4.06)	1006.42 (-8.33)	61.35 (7.31)
2014-15	72760 (23.10)	16700 (13.86)	16150 (9.42)	1097.86 (31.13)	57.17 (7.52)
2013-14	59108 (11.28)	14667 (-7.34)	14760 (5.11)	837.21 (8.97)	53.17 (1.92)
2012-13	53116 (6.90)	15828 (17.85)	14042 (12.81)	768.29 (11.65)	52.17 (15.11)
2011-12	49689 (23.55)	13431 (67.93)	12447 (5.42)	688.13 (13.48)	45.32 (2.81)
2010-11	40218	7998	11808	606.38	44.08
CAGR	10.56	13.78	10.69	6.26	4.51

Source: Company Annual Reports (2011-2020)
Note: Value within parenthesis indicates Year on Year Growth in percentage

Table 4 Shows the Growth in Assets under Management of Selected NBFCs-D in Tamilnadu during 2011-20. The study found 23.55 percent YOY growth rate in Assets under Management (AUM) of Sri Ram Transport Limited in 2011-12 over previous year value of Rs 40218Cr. In next year (2012-13) company reported only 6.90 percent growth in AUM by reaching to Rs 53116 cr. Similarly, in 2013-14 company reported 11.28 percent of growth over previous value by reporting AUM of Rs 59108. In the year 2014-15 company's AUM increased to Rs 72760 Cr with YOY growth of 23.10 percent. In 2015-16 SRTFL reported AUM of Rs 78761 Cr with YOY growth rate of 8.25 percent. Thereafter, the study observed substantial growth in AUM in the year 2016-17 Rs 95306 Cr with 21.01 percent of growth over previous year. In the year 2017-18 AUM has grown to Rs 96253 Cr with growth rate of 0.99 percent. In the last two years AUM of the company have grown with YOY growth rates of 8.55 percent (Rs 104482 Cr) and 5.04 (Rs 109750 Cr) percent respectively. In overall, SRTFL Company's Assets under Management has grown with CAGR of 10.56 percent during the study period. SRTFL AUM value crossed One Lakh core which is highest among all the NBFCs-D this is mainly attributable to substantial rise in cash and cash equivalents, derivative instruments and loans. The study also found substantial growth of 67.93 percent YOY growth rate in Assets under Management (AUM) of Sri Ram City Union Finance limited in 2011-12 over previous year AUM of Rs 7998 Cr. In next year (2012-13) company reported 17.85 percent growth in AUM by reaching to Rs 15828 cr. Similarly, in 2013-14 company reported negative growth of -7.34 percent of over previous value by reporting AUM of Rs 14667 Cr. In the year 2014-15 company's AUM increased to Rs 16700 Cr with YOY growth of 13.86 percent. In 2015-16 SRCUL reported AUM of Rs 19576 Cr with YOY growth rate of 17.22 percent. Thereafter, the study observed substantial growth in AUM in the year 2016-17 Rs 24906 Cr with 27.23 percent of growth over previous year. In the year 2017-18 AUM has grown to Rs 27461 Cr with growth rate of 10.26 percent. In the last two years AUM of the company have grown with YOY growth rates of 5.29 percent (Rs 28915 Cr) and 0.59 (Rs 29085Cr) percent respectively. In overall, SRCUFL Company's Assets under Management has grown with CAGR of 13.78 percent during the study period. This is the highest CAGR among all the selected NBFCs-D during the study period. This is also attributable to substantial growth in cash (two fold) and bank balances in 2020.

Similarly, Sundaram Finance limited Assets under Management was Rs 110808 Cr in 2010-11 which has grown by 5.42 percent in 2011-12 i.e. Rs 12447. Similarly, in 2012-13 company reported growth of 12.81 percent of over previous value by reporting AUM of Rs 14042 Cr. Similarly, in 2013-14 company reported growth of 5.11 percent of over previous value by reporting AUM of Rs 14760 Cr. In the year 2014-15 company's AUM increased to Rs 16150 Cr with YOY growth of 9.42 percent. In 2015-16 SRCUL reported AUM of Rs 16806 Cr with YOY growth rate of 4.06 percent. Thereafter, the study observed substantial growth in AUM in the year 2016-17 Rs 18580 Cr with 10.56 percent of growth over previous year. In the year 2017-18 AUM has grown to Rs 22857 Cr with growth rate of 23.02 percent. In the last two years AUM of the company has grown with YOY growth rates of 31.15 percent (Rs 29976Cr) 8.79 (Rs 32612 Cr) percent respectively. In overall, SFL Company's Assets under Management has grown with CAGR of 10.69 percent during the study period. This is mainly attributable to substantial rise in investment and loans during the study period. Similarly, Shakti Finance limited Assets under Management was Rs 606.38 Cr in 2010-11 which has grown by 13.48 percent in 2011-12 i.e. Rs 68813. Similarly, in 2012-13 company reported growth of 11.65 percent of over previous value by reporting AUM of Rs 768.29 Cr. Similarly, in 2013-14 company reported growth of 8.97 percent of over previous value by reporting AUM of Rs 837.21

Cr. In the year 2014-15 company's AUM increased to Rs 1097.86 Cr with YOY growth of 31.13 percent. In 2015-16 SKFL reported AUM of Rs 1006.42 Cr with YOY negative growth rate of 18.33 percent. Thereafter, the study observed marginal growth in AUM in the year 2016-17 Rs 1010.62 Cr which is 0.42 percent of growth over previous year. In the year 2017-18 AUM has grown to Rs 1025.77 Cr with growth rate of 1.52 percent. In the last two years AUM of the company has grown with YOY growth rates of 2.91 percent (Rs 1055.58 Cr) and 5.43 (Rs1112.87 Cr) percent respectively. In overall, SKFL Company's Assets under Management has grown with CAGR of 6.26 percent during the study period. This is attributable to substantial growth in loans and investment. Similarly, Ne link overseas finance limited AUM was Rs 44.08 Cr in 2010-11 which has grown by 2.81 percent in 2011-12. Similarly, in 2012-13 company reported growth of 15.11 percent of over previous value with AUM of Rs 52.17 Cr. Similarly, in 2013-14 company reported growth of 1.92 percent of over previous value with AUM of Rs 53.17Cr. In the year 2014-15 company's AUM increased to Rs 57.17 Cr with YOY growth of 7.52 percent. In 2015-16 NLOFL reported AUM of Rs 61.35 Cr with YOY growth rate of 7.31 percent. Thereafter, the study observed growth in AUM in the year 2016-17 Rs 64.36 Cr which is 4.91 percent of growth over previous year. In the year 2017-18 AUM has grown to Rs 70.83 Cr with growth rate of 10.05 percent. In the last two years AUM of the company has grown with YOY growth rates of 2.53 percent and 5.43 (Rs1112.87 Cr) percent. In overall, SKFL Company's Assets under Management has grown with CAGR of 4.51 percent during the study period.

E-Earnings and Profitability

Earning and profitability is a fourth parameter of CAMELS technique. Earnings are bottom line indicator of operational efficiency, risk, profitability, financial health and early indicator of financial weakness. In the present study CAMELS framework earnings and profitability capacity of the NBFCs-D measured through growth in total income, total cost to total income ratio, operating profit ratio, and net interest margin, net profit margin Return on Total Assets (ROTA, Return on Equity (ROE) or Net worth. Return on Equity is investment related profitability ratio. Return on equity refers to the rate of return generated on the owner's equity. Owner's equity comprises of equity capital plus reserves and surplus and minus accumulated losses. Return on equity may be positive or negative. Return on equity is positive when net profit is positive, in contrast, ROE is negative when company reports net losses. Positive ROE indicates good profitability on equity investments and high management efficiency and negative ROE indicates worst performance of the management and unprofitability on investments. Therefore, positive ROE is preferred than negative ROE. Return on equity is calculated by net profit divided by owner's equity multiplication by 100.

Table 5. Exhibits the Return on Equity of the selected NBFCs-D in Tamilnadu during 2011-2020

YEARS	SRTFL	SRCUFL	SFL	SKFL	NLOFL
2019-20	13.90	13.88	13.05	7.24	-86.42
2018-19	16.19	15.47	22.33	7.12	-13.74
2017-18	18.89	12.80	13.63	7.59	-5.40
2016-17	11.02	11.19	13.57	10.25	5.89
2015-16	11.60	11.74	14.41	8.04	6.52
2014-15	13.40	13.61	15.25	12.04	6.18
2013-14	15.28	17.98	18.40	11.57	6.59
2012-13	18.91	20.35	19.65	12.15	6.41
2011-12	20.98	20.75	19.88	11.05	8.52
2010-11	25.08	19.85	19.30	11.29	9.50
AVG	16.52	15.76	16.95	9.83	-5.59

Source: Company Annual Reports (2011-2020)

The study found that, SRTFL Company's ROE was 25.08 percent in 2010-11. Thereafter, ROE has shown gradual fall in next subsequent years such as18.91 percent in 2012-13, 13.40 percent in 2014-15 and even dropped to lowest of 11.02 percent in 2016-17. This is attributable to fall net profit. Thereafter, ROE has improved substantially to 18.89 percent in 2017-18 owing to double in net profit. In contrast, ROE has fallen to 16.19 percent in 2018-19 and 13.90 percent in 2019-20 respectively. In overall, SRTFL's ROE stood at 16.52 percent during the study period. Similarly, SRCUFL has reported ROE of 19.85 percent in 2010-11 which has rose to 20.75 percent in 2011-12. In contrast, ROE has gradually decreased to 20.35 percent 2012-13, 17.98 percent in 2013-14 and reached to lowest of 11.19 percent in 2016-17 due to substantial growth in net worth than net profit. Thereafter, ROE has improved to 12.80 percent, 15.47 percent in 2017-18 and 2018-19 respectively. In 2019-20 again ROE dropped to 13.88 percent. In overall, the SRCUFL has reported average ROE of 15.76 percent during the study period. Similarly, SFL has reported ROE of 19.30 percent in 2010-11 which has rose to 19.80 percent in 2011-12. In contrast, ROE has gradually decreased to 18.40 percent 2012-13, 15.25 percent in 2013-14 and reached to lowest of 13.57 percent in 2016-17. Thereafter, ROE has improved to 13.63 percent and reached to highest of 22.33 percent in 2017-18 and 2018-19 respectively on account of substantial profit from sale of proportion of business in 2018-19. In 2019-20 again ROE dropped to 13.05 percent due to substantial fall in net profit by 30 percent. In overall, the SFL has reported average ROE of 16.95 percent during the study period. This is highest among all selected NBFCS-D during the study period. Similarly, SKFL has reported ROE of 11.29 percent in 2010-11. Thereafter, company reported ROE of 11-12 percent in next four subsequent years. Thereafter, ROE of SKFL witnessed ups and down such 8.04 percent in 2015-16 due to fall in net profit on accounts of rise in financial cost, employees expenses and other provisions, 10.25 percent in 2016-17, 7.59 percent in 2017-18, 7.12 percent in 2018-19 this is lowest and finally 7.24 percent in 2019-20 due to substantial fall in net profit and increase in net worth. In overall, the average ROE of SKFL stood at 9.83 percent during the study period. On the other hand, NLOFL has reported ROE in first seven years of study period (2011-2017), in between 5-9.50 percent. Thereafter, it has turned into negative percentage of -5.40 percent, -13.74 percent and even reached to worst ratio of -86.42 percent due to net loss reported for the last three years due to huge fall in total income. In overall, the average ROE of NLOFL was -5.59 percent during the study period.

Liquidity refers to ability of the NBFCs-D to meet short term obligations on due date. Liquidity management is major component in asset and liabilities management practices of financial institutions. Liquidity assets are those assets which can be convertible into cash without loss to meet short term obligations. In general liquid assets comprises of cash in hand, cash at bank and marketable instruments. Liquidity analysis is vital for deposit taking NBFCs-D due to dealing with public funds. Therefore, one of the main objectives of ALM is maintenance of adequate liquidity through matching of assets and liabilities maturity periods. In CAMELS technique liquidity analysis is done through two ratios of such as current ratio and absolute liquidity ratio. Absolute ratio or quick ratio is another liquidity ratio measure the liquidity position of a firm to meet its current liabilities on demand. In the liquid assets are those assets which can be convertible into cash without loss. In the present study, absolute liquid ratio is calculated by dividing absolute liquid assets by current liabilities.

Table 6. Absolute Liquid Ratio of selected NBFCs-D in Tamilnadu during 2011-2020 (times)

YEARS	SRTFL	SRCUFL	SFL	SKFL	NLOFL
2019-20	0.26	0.29	0.13	0.04	0.02
2018-19	0.09	0.14	0.06	0.09	0.02
2017-18	0.13	0.08	0.12	0.13	0.02
2016-17	0.19	0.11	0.11	0.11	0.02
2015-16	0.10	0.15	0.10	0.08	0.02
2014-15	0.43	0.26	0.16	0.22	0.02
2013-14	0.57	0.71	0.16	0.05	0.01
2012-13	0.59	0.42	0.15	0.04	0.02
2011-12	0.73	0.28	0.08	0.04	0.02
2010-11	0.63	0.58	0.30	0.05	0.03
AVG	0.37	0.30	0.14	0.08	0.02

Source: Company Annual Reports (2011-2020)

Table 6 exhibits the Absolute Liquidity Ratio of selected NBFCs-D in Tamilnadu during the study period of 2011-20. The study found that, SRTFL has reported absolute liquid ratio of 0.63 times which has increased to 0.73 times in 2011-12. Thereafter, absolute liquid ratio has fallen in subsequent years such as 0.59 times in 2012-13, 0.57 times in 2013-14 and 0.43 times in 2014-15. Thereafter, absolute liquid ratio has dipped to 10.49 times in 2015-16 due to drastic fall in current investment. In contrast, in has slightly improved to 0.19 times in 2016-17 which has again fallen to 0.13 times and 0.09 times in 2018-19. However, in last it has substantial increased to 0.26 times (2019-20). The overall, absolute quick ratio of SRTFL was 0.37 times which is highest among selected NBFCs –D in Tamilnadu during the study period. Similarly, SRCUF has reported absolute quick ratio of 0.58 times in 2010-11 which has fallen to 0.28 times in 2011-12 owing to fall in cash and cash equivalents and rise in loans and advances. Thereafter, this ratio has improved to 0.42 times and reached to highest of 0.71 times in 2013-14 due to three folds increase in cash and cash equivalents and current investments. Thereafter, suddenly it has decreased to 0.26 times in 2014-15 further it has further dipped to 0.08 times in 2017-18 on account four folds fall in cash and cash equivalents. Thereafter, it has improved to 0.14 times in 2018-19 and 0.29 times in 2019-20. In overall, the average of quick ratio of SRCUFL stood at 0.30 times during the study period. Similarly, SFL absolute quick ratio was 0.30 times in 2010-11 which has fallen to 0.08 times in 2011-12. Thereafter, it has improved to 0.15 times in 2012-13, 0.16 times in 2013-14 and 0.16 times in 2014-15. Thereafter, this ratio has fallen to 0.10 times in 2015-16 and 0.11 times in 2018-19 which indicates lowest liquidity position of the firm. Thereafter, it has improved to 0.13 times in 2019-20. In overall, the SFL reported absolute liquidity position of 0.14 times during the study period. The study also revealed that, SKFL absolute liquidity ratio has improved from 0.05 times in 2010-11 to 0.04 times in 2012-13 and reached to highest of 0.22times in 2015-16 to substantial fall in current liabilities short term borrowings and other liabilities. Thereafter, in last four years SKFL has reported absolute liquid ratio of between 0.4 to 0.5 times due to three folds fall in cash and cash equivalents in last three years. In overall, the average absolute liquid ratio was 0.08 times during the study period. On the other hand, NLOFL reported absolute liquid ratio in the range of 0.01to 0.03times during the entire study period with an average of 0.02 times during study period. This indicates very poor liquidity position of the company.

FINDINGS OF THE STUDY-RATING OF COMPANIES AS PER THE CAMEL PERFORMANCE

Table 7. CAMEL Rating For Selected Nbfcs-D in Tamilnadu

Companies /Rating	Capital adequacy (CRAR)	Assets Quality (NNPA)	Management Efficiency (AUM)	Earnings Efficienc y (ROE)	Liquidity (Acid Ratio)
SRTFL	1	3	1	1	2
SRCUFL	1	2	3	1	2
SFL	3	1	2	1	4
SKFL	3	2	4	3	5
NLOFL	2	5	5	5	5

Source: Standards from RBI and other institutions and general standards

CAMEL model ratings are from 1 to 5 which indicate strongest financial soundness to worst financial position. Rating of 1 indicates a strongest financial soundness and lowest or zero risk level, 2 indicates, strong level of financial soundness and lowest risk level, 3 indicates fair level of financial soundness and moderate risk level, four indicates poor financial soundness and high risk level and indicates worst level of financial soundness and highest risk level and default situation level also. The selected NBFC-D companies are rated based on the average values (entire study period) compared to standards.

DESCRIPTION OF CAMEL RATING PERFORMANCE

C-Capital Adequacy: The capital adequacy of selected NBFCs-D is measured through CRAR ratio. In Capital Adequacy SRTFL (23.35%) and SRCUFL (20.55) companies are assigned 1st Rank due to strong level of above 20 percent average during the study period. This indicates its high-risk tolerance capability compared others. Thereafter, NLOFL is assigned 2rd rank due to average capital adequacy level of 19.39 percent. This indicates satisfactory level of capital adequacy of NLOFL during the study period. Thereafter, SKFL and SFL are assigned 3rd Rank with averages of 18.65 percent and 18.27 percent. This indicates fail capital adequacy level of these two companies and moderate risk level.

A-Asset quality: The assets quality of selected NBFCs-D is measured through NNPA ratio. In Asset quality parameter SFL is assigned 1st Rank due to strong level of less than one percent (0.76) average during the study period. This indicates its high quality of assets of SFL. Thereafter, SKFL and SRCUFL are assigned 2rd rank due to average NNPA level of 1.50 and 1.89 percent. This indicates satisfactory level in quality of assets held of SKFL and SRCUFL during the study period. Thereafter, SRTFL assigned 3rd Rank with averages of NNPA of 2.17 percent. This indicates moderate level of asset quality of SRTFL. Finally, NLOFL is assigned 5th Rank with average NNPA of 5.07 percent which indicates worst level of quality of assets and high risk level of assets.

M-Management Efficiency: The management efficiency of the selected NBFCs-D is measured through Assets Under Management (AUM) parameter. In the parameter SRTFL is assigned first rank due having highest AUM of Rs 109750 Cr, followed by SFL 2nd Rank with AUM of Rs 32612 Cr, SRUCFL 3rd Rank with AUM of Rs 29085 Cr, SKFL with Rs 1112 Cr and NLOFL is assigned 5th Rank with lowest AUM of Rs 68.51 Cr. This indicates that first three NBFCs-D have good management efficiency in creation of assets to the firms where last first have poor efficiency.

E- Earning Efficiency: The earning efficiency of selected NBFCs-D is measured through Return on Equity ratio. The study revealed that, SRTFL, SRCUFL and SFL companies are assigned 1st Rank in the earning efficiency due to reported strongest level of above 15 percent. Thereafter, SKFL is assigned 3rd rank due reporting of average ROE of 9.83 percent which indicates fail level and NLOFL is assigned 5th Rank due to reporting of negative ROE of -5.59 percent which indicates loss level and high-risk level of company's profitability.

L- Liquidity: Liquidity: Liquidity level of NBFCs-D is measured through NNPA ratio. In liquidity position no firm is assigned strongest level due to not reporting of above 0.40 percent. However, SRTFL and SRCUFL are assigned 2nd level which indicates satisfactory level of liquidity. In contrast, NLOFL and SKFL companies assigned 5th Ranks which indicated worst level of liquidity position.

CONCLUSION

In overall, the study found that, SRTFL reported strongest level of financial soundness in the aspects of capital adequacy, management efficiency and earning efficiency whereas satisfactory level in liquidity and moderate/fair level in assets quality. Similarly, SRCUFL reported strong level in capital adequacy and earning efficiency, satisfactory level in assets quality and liquidity and fail level in management efficiency. Similarly, SFL has shown strongest level of performance in asset quality and earning efficiency, satisfactory in management efficiency, fair level in capital adequacy and marginal/poor level in liquidity. Similarly, SKFL reported satisfactory level in assets quality, fair level in capital adequacy and earning efficiency, marginal level in management efficiency and unsatisfactory/worst level in liquidity. Finally, NLOF has reported unsatisfactory/worst level of performance in all parameters except capital adequacy. This indicates high risk level/default level of the NLOFL during the study period.

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