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INTEREST RATE SENSITIVITY OF SRI RAM TRANSPORT FINANCE LIMITED (SRTFL) TAMILNADU (INDIA) - AN EMPIRICAL ANALYSIS

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ABSTRACT

Interest rate risk is major risk arise from dynamic market conditions and strongly affect the net interest income economy value of the financial institutions. This impact will be higher when mismatch between assets and liabilities is wider (maturity and interest rate wise). Therefore, present study analyzed the interest sensitivity of assets and liabilities in largest deposit taking NBFCs in Tamilnadu i.e. Sri Ram Transport Finance limited. The study applied GAP Analysis technique which is popular tool to measure of interest sensitivity in different time period. The study period is six years 2015-2020. The study found that significant and wider gap between assets and liabilities in very short period (1 day to 3 months) and insignificant gap in short period (3m to one year) and long period (one year to five years). Therefore, the study found that, effect of interest rate fluctuations on NII and economic value is higher in short period and insignificant short and long period.

INTRODUCTION:

Interest rate risk is one of the market risks affect the earnings and capital of financial institutions in economy, while other risks are concerned with the volatility in exchange rates, commodity prices and equity prices. Among all categories of market risks, interest rate risk is primary risk often affects banks and non-banking financial companies. Volatility in interest risk quickly affects the earnings and economic value of assets, liabilities and off balance sheet items of NBFCs. Therefore, every NBFC has to design an efficient Interest Rate Risk (IRR) management programme in line with its nature, scope, size and risk activities. This is more essential in case of NBFCs dealing with public deposits. A comprehensive IRR management is required for effective management of interest rate risk which must be characterized by appropriate policies, procedures, controls, effective communication system, measurement, monitoring standards and independent review system.

INTEREST RATE RISK –CONCEPUTAL FRAMEWORK (TYPES AND SOURCES)

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Interest risk may categorized as re-pricing risk, basis risk, yield curve Risk, option risk and price risk which are caused by different sources such as funding source, derivative instruments, mortgage operations, fee income business, product pricing strategies and embed options. A brief discussion on type and source of interest rate risk is made in the study.

Re- pricing risk refers to the possibility of re-pricing of assets and liabilities at different times and amounts which will adversely affects NBFCs earnings and economic value of assets and liabilities. This happens in case of long term or fixed interest securities funded by non-maturity deposits (demand deposits), rise in interest rates leads to rise in cost of funding and fall in net yield on long term or fixed securities. **Basis risk** is result of imperfect or unpredictable correlation between two basic indices such as 50 basis points rise in LIBOR (London Inter Bank Offer Rate) but only 25 points rise in primary-based loan rates during the same period In India. **Yield risk** is result of unanticipated change in shape or slope of yield curve of particular security due to linking of assets and liabilities with similar indices with different maturities. For example the yield of 30 years bond may change by 200 basis points where it only 50 basis points in case of 3 years bond. **Option risk** is typically arising due to contractual relation between option seller and option buyers where option buyer has the right to exercise the contract rather than obligation. If option buyer exercised the contract, when NBFCs are in unfavorable position then this type of risk rise. **Price risk** refers to the change in fair value of financial instrument due to change in interest rates. In general trading portfolios, loan portfolios hold for sale and mortgage servicing assets contain price risk

NBFCs should evaluate the relationship between assets structure and funding sources to avoid mismatch between their interest rates and maturity profile. In general, high market based funds are used to fiancé long term or fixed rate loans cause the increase in interest rate risk, it increases the cost of funds, but yield remains same which ultimately reduce the net yield on securities. Hedging of securities is another source of interest rate risk due in unfavorable changes in market interest rates. Mortgage operation cause the price risk to loan portfolio, held for sale portfolio and mortgage loan portfolio services. This affects not only current values but also future business volumes and associated income. Fee income business services such as mortgage, trust, credit cards and non-deposit product sales may be affected by changes in interest rates. Product pricing strategies cause the yield curve risk due to linking of assets and liabilities with same indices with different maturities.

TECHNIQUES OF INTERST RATE RISK MANAGEMENT:

Non-banking financial companies in India are encouraged to use variety of methods to measure and manage the interest rate risks which provide sufficient material to quantify

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the interest rate risk and its impact on the earnings and economic value. However, some the popular methods are discussed in the present study.

- Gap Analysis or Mismatch Risk
- Duration Analysis
- Earnings Simulation Analysis
- Earnings at Risk
- Capital at Risk and
- Economic value of Equity

GAP ANALYSIS/MISMATCH RISK: Gap analysis is a traditional and popular technique of measuring the maturity and re-pricing gaps between assets and liabilities of simple balance sheet items of financial institutions. Gap analysis also measures the impact of interest rate changes on present and future income. Gap analysis has its limitation of less use in case of financial institutions have more complex balance sheet items. In Gap analysis balance sheet items are fragmented into Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL), off balance sheet items as per their re-pricing characteristics which are further summarizes the re-pricing mismatches for as per specific time buckets. The basic GAP Ratio is calculated by given formulae.

$$\text{GAP} = \frac{\text{Rate Sensitive Assets - Rate Sensitive Liabilities}}{\text{Average Earning Assets}}$$

(OR)

$$\text{GAP} = \frac{\text{Rate Sensitive Assets - Rate Sensitive Liabilities}}{\text{Rate Sensitive Assets}}$$

Rate Sensitive Assets and Rate Sensitive Liabilities: An asset or liability is normally classified as rate sensitive if:

i) within the time interval under consideration, there is a cash flow
ii) the interest rate resets/re-prices contractually during the interval
iii) dependent on RBI changes in the interest rates/Bank Rate
iv) it is contractually pre-payable or withdrawal before the stated maturities

GAP ANALYSIS: In the present study, Gap analysis is used as a standard tool to measure the interest rate sensitivity of assets and liabilities of selected non-banking financial companies in Tamilandu during the data availability period of 2015-2020. This is due to reason that, all selected non-banking financial companies segregated their assets and liabilities as per different time buckets such as very short period, short period and long period.

1) VERY SHORT PERIOD BUCKET: Very short period time bucket consist of time maturity period up to three months. This is further segmented into of three sub-time maturity buckets.

P-ISSN: 2204-1990; E-ISSN: 1323-6903
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a) Up to 30/31 days time bucket
b) Above one month and up to two months
c) Above two months and up to three months

2) SHORT PERIOD BUCKET: Short period time bucket consist of time maturity period from three months to up to one year. This is further segmented into two sub-time maturity buckets.
   a) Above 3 months & up to 6 months
   b) Above 6 months & up to 1 year
3) LONG PERIOD BUCKET: Long term period time bucket consists of time maturity period from above one year. This is further segmented into three sub-time maturity buckets.
   a) Above one year and up to three years
   b) Above three years and up to five years
   c) Above five years

RBI- Rate Sensitive Assets (RSA): Deposits, money at call, short notice and other placements, fixed income securities (government securities, deep discounted bonds, bonds debentures, cumulative, noncumulative and redeemable preference shares), floating rate instruments, Advances, bills of exchange, promissory notes, term loans, corporate loans and short term loans and assets on lease, Reverse Repos/Swaps and bills discounted, interest rate swaps and other derivates. (As per RBI)

Non Sensitive Assets: cash, remittance in transit, balances with banks, fixed assets, Investments in Equity shares, convertible preference shares, shares of subsidiaries/joint ventures, venture capital units. (As per RBI)

Rate Sensitive Liabilities (RSL): Notes, bonds and debentures (floating rate, fixed rate, embedded options), Deposits, (fixed and floating rate), borrowings, term borrowings and borrowings from others and Repos/ bills rediscounted/forex swaps. (As per RBI)

Non-Sensitive Liabilities: Capital and reserves, Gifts, grants and beneficiations, current liabilities and provisions. (As per RBI)

FEATURES OF GAP ANALYSIS:

- Gap analysis is use to find out the periodic, cumulative or average mismatches of assets and liabilities
- The Challenging task in Gap analysis is determining rate sensitivity. All investments, advances, deposits, borrowings, purchased funds, etc. that mature/reprice within a specified timeframe are interest rate sensitive.
- In Gap analysis gap refers to the difference between RSA and RSL as per time buckets, which may results into positive or negative gap.

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- Gap is positive when RSA > RSL, which means that assets are sensitive. In this situation rise in market interest rates show positive impact on the net interest income and asset value of firms, in contrast, fall interest rates hamper the earnings of the firm.
- Gap is negative when RSL >RSL, which means that liabilities are sensitive. In this situation fall in market interest positively affect net interest income, in contrast, rise in market interest rates adversely affect net interest income.
- Gap is "Even Gap "when RSA=RSL which means that rate sensitive assets are equal to rate sensitive liabilities. This indicates that interest rate fluctuations do not effect the net interest income.
- Gap analysis an essential tool of measuring the impact of given rate of interest rate change in net interest income which can be done by multiplying gap ratio with assumed rate change. Example, a bank has 10 percent one year average gap, if interest declined by 3 percent, it impact on net interest income is 10*3, 30 basis points fall in net interest margin. This helps to sustainable interest rate shift.

  Gap analysis has many merits in utilization as compared to modern techniques such as
  - Identification of Re-pricing mismatches
  - Does not required sophisticated technology
  - Easy to develop and interpretation of results.
  - This is most useful to financial institutions with simple balance sheet structure and limited assets and liabilities.

  Gap analysis has many demerits in application such as

  - Generally captures only re-pricing risk and other are ignored (basis, yield curve and option risks)
  - It assumes parallel rate changes in assets and liabilities where interest rates are dynamic
  - It does not measure the material intra-period re-pricing risk
  - This method failed in measuring the changes in economic value of capital and
  - This is method is not suitable to financial institution with complex balance sheet structure.

To overcome the above challenges improved gap analysis techniques are found as dynamic or scenario gap analysis.

DURATION ANALYSIS: Duration analysis reflects the impact of change in interest rate on the change in the economic value or position of a particular financial instrument. This method considers timing and size of cash flows before the contractual maturity of

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financial instruments. Duration analysis is done in three methods such as Macaulay duration, Modified duration and effective duration. Macaulay duration method is basic duration method of measuring the weighted average term of maturity of security's cash flows for the period of short term and long term. Macaulay duration is further down stretch to "Modified duration" method to measure the price sensitivity of assets and liabilities as per small interest rates changes (less than 100 basis points). However, modified duration method is not suitable to measure the price sensitivity of assets and liabilities in case of embedded options (option risk) due to assumption of no impact of interest rate changes on instrumental cash flows. To overcome this problem Effective duration method is developed. Effective duration method measures the price sensitivity in case of embedded options contracts. In general, all duration methods measure the price sensitivity as results of small changes in interest rates, but, in fact, large interest rate changes have large impact on the price of assets and liabilities. This problem can be overcome by adopting new technique of convexity-adjusted duration method. The two major drawbacks of the duration methods are measurement of small interest rate changes only and requirement of complex management information system.

REVIEW OF LITERATURE:

(2018)[9] Noor et al explored the conceptual background of Basel III and investigated determinants of credit risk and interest rate risks during pre and post economic crisis i.e. 2002-15. The study has examined the impact of Basel III norms on the 36 listed banks in India. The empirical results witnessed that a positive relationship between capital adequacy requirement and gross non-performing assets and Net Interest Margin. Consequently, the analyst opined that this relationship may cause lower GDP in the future economy of India.

(2018)[10] Peter et al have an empirical analysis on the impact of bearing of interest rate on banks net worth and household's consumption and investments in 104 Europe banks by using novel data. The study found that interest rate risk is small on aggregates of all selected banks, but heterogeneous in the cross sectional. The study also found that net worth of the half of sample banks increased during the study period. The study also found that cross country differences in loan

(2017)[12] Devendra has done an empirical research work on asset and liability management practices in two public sector banks namely Andhra bank and Bank of India and two private banks (HDFC and AXIS) during 2007-16 which indicates study at regional level. The study has focused on measurement of interest rate risk analysis through GAP analysis and finding association between NPA and asset liability structure. In addition, he also examined the impact of ALM practices on performance of banking sector. The study observed that to avoid cash crunch problems private

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banks kept large cash reserves than public sector banks. Private sector banks reported good returns from operations than public sector banks during the entire study period. The study also observed that profitability position of private sector is much higher than public sector banks due to high employee's proficiency.

(2017)[14] Basappa has analyzed asset and liability management practices in regional rural banks during 2011-2015 with special reference to Karnataka Vikas Grameena Bank. In the study he examined the risk management practices of Karnataka bank in aspects of liquidity risk, interest rate risk and credit risk. The study observed unsatisfactory level of capital adequacy ratio Tier II compared to Tier I of KVGB. The study also found that significant variation between interest gap and asset- liability gap during the study period. However, maturity gaps for very short and short period reported negative in first three years and positive in next two years, in contrast, long maturity gaps found positive gap during entire study period. This indicates that firm has good liquidity position during the study period.

(2017)[17] Christoph & Memmel has opined that credit risk and interest rate risk are associated with credit granting and non-separable. Therefore, banks have to bear interest rate risk as part of their operations. In the study he examined the validity of two reasons namely long optimization horizon and hedging of earning risk which is result of interest levels falls. The empirical results supported that banks with longer optimization horizon can bear more interest rate risk. The study also found that banks with strong earning exposure to higher interest rate risks. The study found that banks are approaching derivatives contrast to hedge their interest rate risks.

(2014)[37] Vighneswara Swamy made an attempt to illustrate the significance of interest rate risk management and approaches towards its management in the Indian context. The study opined that addition to the existing return on Interest Rate Sensitivity under Traditional Gap Analysis, a new return is being introduced to monitor the interest rate risk using Duration Gap Analysis (DGA), called Interest Rate Sensitivity under Duration Gap Analysis (IRSD). The DGA involves bucketing of all Risk Sensitive Assets (RSA) and Risk Sensitive Liabilities (RSL) as per residual maturity/re-pricing dates in various time bands and computing the Modified Duration Gap (MDG). One of the important things to note is that the RSA and RSL include the rate-sensitive off-balance sheet assets and liabilities as well. MDG can be used to evaluate the impact on the Market Value of Equity (MVE) of the bank under different interest rate scenarios. The past few years have seen banks' foray into financing long-term assets, such as home loans and infrastructure projects. Banks have been allowed to raise funds through long-term bonds with a minimum maturity of five years to the extent of their exposure of residual maturity of more than five years to the infrastructural sector.

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RESEARCH GAP: The above literature review reveals that, many research studies have emphasized on the ALM practices, credit risk along with interest rate risk and market risk in banking sector etc. But no study has focused on the interest rate sensitivity in deposit taking NBFCs. However, interest rate sensitivity analysis is also high significant in deposit taking NBFCs where public funds involved. Therefore, present study fulfills this research gap and develops new line argument in research.

OBJECTIVES OF THE STUDY:

- To examine the Interest Rate Sensitivity of selected NBFCs in Tamilnadu for very short period
- To examine the Interest Rate Sensitivity of selected NBFCs in Tamilnadu for short period
- To examine the Interest Rate Sensitivity of selected NBFCs in Tamilnadu for long period

RESEARCH METHODOLOGY: Present study is purely based on secondary data collected from the annual reports of the companies. The study period is six years i.e. from 2014-15 to 2019-20. The technique used for analysis is GAP Analysis which is popular method of measuring interest rate sensitivity of assets and liabilities of financial institutions. The variables in the study are rate sensitive assets and liabilities disclosed in company websites. The statistical techniques are percentages and cumulative gaps. The selected company in the study top deposit taking NBFCs in Tamilnadu i.e. Sri Ram Transport Finance Company Limited.

DATA ANALYSIS AND INTERPRETATION

INTEREST RATE SENSITIVE ANALYSIS OF SRI RAM TRANSPORT FINANCE LIMITED (SRTFL**):** Sri Ram transport finance private limited company started disclosing rate sensitive assets and rate sensitive liabilities maturity pattern since 2015 financial year onwards. Therefore, in the present study gap analysis use to measure the Interest Rate Sensitivity carried since 2015 to 2020 with a standard tool of GAP analysis. Rate sensitive assets of the company consist of deposits, advances, foreign currency assets. Similarly, Rate sensitive liabilities consist of investments, borrowings and foreign currency liabilities. The company fragmented its maturity pattern into eight time buckets from very short period of up to thirty days to very long period of above five years. In the present study interest rate sensitivity is analyzed for the three periods such as very short period, short period and long period. In general tolerance limit for mis-match gap is 15 percent as per RBI guidelines in very short period where tolerance limit for other buckets prescribe by ALM committees internally.

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GAP ANALYSIS FOR VERY SHORT PERIOD

Table 5.1A exhibits interest rate sensitivity of Sri Ram Transport Finance Limited for very short period.

The study revealed that, for the year 2014-15, SRTFL reported wide positive gap of 84.38 percent in time bucket of 30/31 days and 81.57 percent for time bucket of over 1 month & up to 2 months. Similarly, for time bucket of over 2 months & up to 3 months gap is narrow to 12.04 percent only. SRTFL reported a cumulative wide positive gap of 174.69 percent during very short period due to reporting of positive gap in three sequential time buckets. This is due to huge advances than borrowings. This indicates sensitivity of assets and positive relation between interest rate movements and net interest income (NII). Similarly, for 2015-16, for time of 30-31 days gap is positive with 64.26 percent and 61.58 percent for time bucket of over 1 month & up to 2 months. In contrast, company reported negative gap of -50.66 percent for time bucket of over 2 months & up to 3 months due to huge fresh borrowings. Consequently, cumulative gap during the period is 67.30 percent which indicates assets sensitivity. In 2016-17, for time of 30-31 days gap is positive with 59.83 percent. In contrast, company reported negative gap of -1.88 percent for time bucket of over 1 month & up to 2 months and -13.75 percent for time bucket of over 2 months & up to 3 months decrease in advances. The cumulative gap during the period is 11.71 percent which indicates assets sensitivity and positive relationship between interest rates and NII. In 2017-18, for time bucket of 30-31 days gap is positive with 34.94percent. In contrast, company reported wide negative gap of -81.79 percent for time bucket of over 1 month & up to 2 months and -131.05 percent for time bucket of over 2 months & up to 3 months three and four fold increase in borrowings. Consequently, cumulative gap during the period is wide negative of -177.89 percent which indicates liabilities sensitivity, negative relationship between interest rates and NII and poor liquidity position. This means fall in interest rates leads rise in NII and rise in interest rates leads to fall in NII. The study found that, in year 2018-19 SRTFL reported positive gaps in three very short period time buckets such as 14.48 percent, 13.12 percent and 24.83 percent respectively. SRTFL reported cumulative gap of 52.43 percent which indicates assets sensitivity. In the last year 2019-20, gap in time bucket was extended abnormally to negative of -3477.6 percent in one month time bucket due to substantial fall in advances and huge borrowings and foreign currency liabilities and moratorium issue during covid period. In next two time buckets it is turned to normal rates levels of -31.54 percent and positive of 87.77 percent. In overall cumulative is -531.39. However, this gap is results of covid-19 situation which is exceptional. The study revealed that, SRTFL has reported positive cumulative gap in four out of six years which indicates assets sensitivity and positive relationship between interest rates and NII in very short period. In contrast, company reported negative cumulative gap in 2017-18 and 2019-20 which indicates liabilities sensitivity and positive relationship between interest rates and

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NII and economic value. The study found, up trend in borrowings to finance most of the advances rather than deposits.

GAP ANALYSIS FOR SHORT PERIOD: Table 5.1**B** exhibits interest rate sensitivity of Sri Ram Transport Finance Limited for short period.

The study revealed that, in the year 2014-15, SRTFL reported positive gap of 7.45 percent in time bucket of over 3 month & up to 6 months and 39.04 percent for time bucket of over 6 Months & up to 1 year due to huge advances. SRTFL reported a cumulative positive GAP of 46.49 percent during this short period due to reporting of positive gap in two short term buckets . This shows positive impact of interest rate rise on NII. Similarly, for 2015-16, for time of over 3 month & up to 6 months gap is negative of -5.62 percent and positive of 12.46 percent for time bucket of over 6 months & up to 1 year. The cumulative gap during the period is 6.84 percent which indicates tolerance limit of assets sensitivity. Similarly, for 2016-17 for time of over 3 month & up to 6 months gap is wide negative of -32.48 percent due to huge borrowings than advances, in contrast, it is wide positive of 27.08 percent for time bucket of over 6 months & up to 1 year due to huge advances than borrowings. The cumulative gap during the period is -5.40 percent which indicates sensitivity of liabilities within tolerance limit of 15 percent and rise in NII when interest rates fall. This gap is very narrow which indicates good matching between assets and liabilities and low interest rate sensitivity. Similarly, in year 2017-18 company has reported positive gap in two time buckets as 4.92 percent and 25.64 percent respectively. Consequently, the cumulative gap is 30.56 percent during study period, this implies assets sensitivity and positive relationship between interest rates and NII. Similarly, for 2018-19 for time of over 3 month & up to 6 months gap is negative of -2.97 percent but positive of 15.27 percent for time bucket of over 6 months & up to 1 year. The cumulative gap during the period is 12.30 percent which indicates sensitivity of assets and rise in NII when interest rates rise. In year 2019-20 company has reported positive gaps in two time buckets such as 17.25 percent and 91.07 percent respectively. Consequently, the wide cumulative gap of 108.32 percent during study period, this implies significant assets sensitivity and positive relationship between interest rates and NII along with good liquidity position. The study found SRTFL has maintained positive cumulative gap in five out of six years of the study period which indicates assets sensitivity and positive relationship between interest rates and NII. Company reported narrow negative cumulative gap in 2016-17 which indicates liabilities sensitivity and negative relationship between interest rates and NII. This is mainly due to good maintenance of rate sensitivity advances in line with rate sensitive liabilities during two time buckets.

GAP ANALYSIS FOR LONG PERIOD

Table 5.1 C exhibits interest rate sensitivity of Sri Ram Transport Finance Limited for Long period. The study revealed that, in 2014-15, SRTFL reported positive gap of 11.18

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percent in time bucket of over 1 year & up to 3 years. In contrast, this is turned in to negative gap of -17.18 percent and -414.44 percent for time buckets of over 3 years & up to 5 years and above five years time buckets respectively, this is attributable to the reason that company is very few advances with maturity period of over five years which are not well supporting long term borrowings. Consequently, SRTFL reported a negative wide cumulative gap of -420.44 percent during long period due to reporting of negative gap in two long time buckets particularly above five years due to huge borrowings and meager advances. This indicates that fall in interest rate shows leads to rise in net interest income (NII). Similarly, for 2015-16, for time bucket of over 1 year & up to 3 years gap is positive with 26.55 percent and 21.43 percent Over 3 years & up to 5 years. In contrast, company reported negative gap of -59.67 percent for time bucket of over five years. Consequently, cumulative gap during the period is -11.72 percent which indicates liabilities sensitivity. Similarly, in year 2016-17 company has reported positive gaps in first two time buckets as 17.98 percent and 26.31 percent respectively. In contrast, company reported negative gap of 20.55 percent for time bucket of over five years. Consequently, the cumulative gap is 23.75 percent during long period. This implies assets sensitivity which shows implies that rise in interest rates rise NII.

The study found that, in year 2017-18, SRTFL has reported positive gaps in first two time buckets as 28.20 percent and 31.53 percent respectively. In contrast, company reported negative gap of -57.05 percent for time bucket of over five years. Consequently, the narrow cumulative gap is 2.68 percent during long period. Similarly, in 2018-19, has reported positive gaps in first two time buckets as 27.62 percent and 17.33 percent respectively. In contrast, company reported negative gap of -310.86 percent for time bucket of over five years. Consequently, the cumulative gap is -265.91 percent during long period. Similarly, in the last year company has reported positive gaps in first two time buckets as 12.87 percent 12.73 percent respectively. In contrast, company reported negative gap -13 percent for time bucket of over five years. Consequently, the cumulative gap is 12.61 percent during long period. Company has reported positive gaps in time bucket of below five years which indicates assets sensitivity and negative gap in above five years gap which indicates liabilities sensitivity and negative impact of interest rate rise on NII in long period for period of above five years.

FINDINGS OF THE STUDY:

Interest rate sensitivity analysis of SRTFL of very short period (01day to 3 months) revealed that, Company has reported wide positive cumulative GAP values of 174.69 percent (2014-15), 67.30 percent (2015-16) and 52.43 percent (2018-19). This implies that high mismatch between assets and liabilities (Assets Sensitivity) and high interest rate sensitivity of assets. This also means that rise in interest rates will affect net interest income positively, contrary, fall in interest rates will negatively affect net interest income.

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In contrast, company has reported wide negative cumulative gap of –177.89 percent in 2017-18 this is due to substantial fall in deposits due to demonetization and GST and -3421.23 percent in 2019-20 due substantial fall in advances during world pandemic decease. This implies high mismatch between liabilities and assets (liabilities sensitivity). This implies inverse relationship between interest rates, NII and economic value, rise in interest rates leads to fall in NII and fall in interest rates leads to rise in NII. In year 2016-17, SRTFL company has reported narrow positive cumulative gap, indicates high matching of assets and liabilities and low impact of interest rates fluctuations on the NII and economic value of the company. However, the study observed gradual decrease in cumulative gap from 174.69 percent (2014-15) to 11.71 percent (2016-17), thereafter, again wide gaps observed due to demonetization, GST and Covid 19 situation. The study observed gradual improvement in reduction of gap in all time buckets during 2015-19 but in 2019-20 (refer cross tables)it reported abnormal negative gap due to substantial fall in advances in time bucket of up to 30/31 days i.e from Rs 3305 Cr in 2019 to RS 56.38 Cr in 2019.

Interest rate sensitivity analysis of SRTFL for short period (six months to one year) revealed that, company reported wide positive cumulative gap as 46.49 percent in 2014-15, 30.56 percent in 2017-18 and 108.32 percent in 2019-20. This indicates assets sensitivity and positive relation between interest rates and NII along with good liquidity position. However, study observed narrow maturity gaps such as 6.84 percent in 2015-16, -5.40 percent in 2016-17 and 12.30 percent in 2018-19. This indicates low interest rate sensitivity of SRTFL and high efficiency of assets and liabilities management practices for short period. This is mainly due to good maintenance of rate sensitivity advances in line with rate sensitive liabilities during two time buckets. The study found, gradual decrease in the cumulative gap between RSA and RSL in short period during the study period of 2015-2019 i.e. from 46.49 percent in 2014-15 to 12.30 percent in 2018-19. However, in last year wide cumulative positive gap is reported due to substantial fall in RSL.

Interest rate sensitivity analysis of SRTFL for long period revealed that, company has reported wide negative cumulative gap between liabilities and assets during two out of six years of the study period. This is followed as -420.4 percent in 2014-15 and -265.91 percent in 2018-19. This is due to having long term borrowings without adequate support from long term advances in time bucket of over five years. In contrast company reported narrow and limited cumulative gap of -11.72 percent in 2015-16, 23.75 percent in 2016-17, 2.68 percent in 2018-19 and 12.61 percent in 2019-20. This indicates insignificant interest sensitivity exposure of assets and liabilities of the company in long run.

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CONCLUSION: The study concludes that, in SRTFL company interest rate sensitivity of the rate sensitive assets and liabilities is very high higher for very short period (1 day-3 months. On the contrary, insignificant interest rate sensitivity is observed for short and long period through maintaining adequate balance between rate sensitive assets and liabilities. This indicates that, interest rate fluctuation will affect the NII of the SRTFL for very short period but not short and long period, which implies no effect on economic value.

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