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Research Article

Asset Liability Management of Small Finance Banks in India

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Abstract

Asset Liability Management (ALM) is a regulatory requirement in India and also required for strategic Bank Management. ALM provides an integrative and innovative perspective to the Balance Sheet Management of Banks. Gap Analysis, a technique of Asset Liability Management is used to analyze the Liquidity Risk or Interest Rate Risk. In this paper, Gap Analysis Technique (maturity profiling) has been used to analyze the Liquidity Risk of Small Finance Banks In India during the period 2020-2021. It was concluded that the majority of the Banks taken for study were exposed to liquidity risk.

Keywords: Asset Liability Management, Liquidity Risk, Gap Analysis, Maturity Profiling, Maturity Bucket.

Introduction

Deregulation has increased competition, narrowed spread, lowered the barrier to the flow of capital, changes in financial markets, as foreign investors gained access to the domestic market, and risk associated with operations of banks have become more complex. Now the banks require strategic management to operate the banks successfully. Competition has increased after the entry of foreign banks in India. The volatile interest rates and exchange rates have put the pressure on banks. To formulate asset and liabilities portfolio in such a way that the risk in a portfolio is minimized banks management needs to manage the balance between profitability and stability. The major task of bank management is to manage market, liquidity, and interest rate risk. Hence, banks need a framework which enables them to control these risks and help them to optimize the efficiency of the banks. In this context, Asset Liability

Management (ALM) is a useful and helpful tool to analyze the liquidity and interest rate risk for the banks.

As per guidelines banks have full-fledged Asset Liability Management department in their head office, which keeps control on the market scenario, most of the banks have Asset Liability Management which needs to be strengthened. Hence, banks should adopt risk management techniques to study the asset liability mismatch and also the management of several other risks in banks. One of the important decisions taken by the RBI on the supervision of banks is risk management. Financial markets have less than one far 10 reaching changes by liberalization and deregulation as well as rapid developments in communication and internet technologies. Banks in India have not given much importance to the potential risk and are expected to evolve the mechanism and system to control and manage with the global standards and procedures. As the banks are not operating in a protected and regulated environment, there is a need to develop and improve the capability to understand the changes in the economic environment. Risk management is a comprehensive process which is used to minimize the adverse effects due to various factors like political and economic.

Review of Literature

The Basel I (2001) started with improvement and surrounding the expansive supervisory structure and proposed required norms for getting best practices for the supervision instrument of the banking framework. The mission behind this was to inspire global convergence towards common approaches and standards for the banking system. Basel I additionally prescribed setting up of severe hazard and capital administration prerequisites to guarantee sufficient capital reserve for different risk exposure during the time spent loaning and acquiring activities. It deduces banks need to hold larger capital amounts for greater exposure of risks. This will ensure solvency and stability.

The Basel II norms (2004) specified the international standard for the amount of capital to be maintained by banks as a safety tool to protect against various risks associated with banking. Basel II ensures setting up strict capital requirement regulations for the banks against the risks they are holding to meet any contingencies. It concludes that the risk and the capital are directly proportional to each other. Minimum capital requisite, supervisory review, and market discipline are the three pillars of the Basel II norms. The maintenance of the regulatory capital is the prime objective of the first pillar of Basel II norms. It equips the bank with better tools to ensure risk-free banking

The Basel III norms (2010) Basel III are succession to Basel II to enhance the banking regulatory framework. It builds on the previous Basel norms and strengthens further the bank stability of liquidity requirements to help fight the risks. Basel III focuses on individual bank level to reduce the risk of system-wide banking structure. Minimum Capital Requirement, the supervisory review process, and market discipline are the three pillars of Basel III norms. The current capital requirement is 1% higher than prescribed in the Basel III norms so the government is trying to align to adhere to the norms.

Prince Paul Antony K. and Manimegalai J. (2018), Analysis of Asset Liability Management of Indian banks were made from 2014 to 2018. Through ratio analysis the framework to define, measure, monitor, modify and manage these risks is formed.

Umarani R and Jayanthi M (2017) examined the liquidity Risk in SBI & associate banks in India, by using GAP Analysis Technique (maturity profiling). This paper assesses the liquidity risk carried by the sample banks in the year 2011- 2012. The findings showed that the banks were exposed to liquidity risk.

Joshi1 P. and R. V. Sontakay (2017) did research of various ALM techniques in the literature, aiming for financial stability. The survey guides emerging banks to decide the type of ALM process used by the banking industries.

Mukasinayobye Immaculee and Mulyungi Patrick (2018) assessed the effect of asset liability management on commercial banks of the African country Rwanda. The specific objectives were to determine the influence of capital adequacy, income diversification, and operating efficiency on the financial performance of commercial banks in Rwanda. The study adopted quantitative study design.

Tee (2017) evaluated asset liability management and therefore the profitability of listed banks in Ghana. The main agenda of this paper is to seek out the influence of asset and liability management on the profitability of listed banks in Ghana. Multiple rectilinear regression is employed by taking into consideration ROA because the variable, and TAS (the total asset) and TLT (the total liability) representing the asset and liability mix of the banks.

Devendra M. and Prof. Reddy Mohan P. (2017) this research outlined mainly on the measurement of rate of interest risk publicly sector banks which include Bank of India and Andhra Bank and personal sector banks which include Axis Bank and HDFC Bank using the GAP analysis model

Objective and Research Methodology

The present study analyses asset - liability management in Small Finance Banks in India by determining their liquidity position through maturity profiling method for the period 2019-2020. The data used in this study was compiled from the RBI Publication “Statistical tables relating to Banks in India” which was taken from the RBI website. The study covered ten banks under the Small Finance Banks category which are listed below:

- ★ AU Small Finance Bank Ltd.
- ★ Capital Small Finance Bank Ltd.
- ★ Equitas Small Finance Bank Ltd.
- ★ ESAF Small Finance Bank Ltd.
- ★ Fincare Small Finance Bank Ltd.
- ★ Jana Small Finance Bank Ltd.

- ★ North East Small Finance Bank Ltd.
- ★ Suryoday Small Finance Bank Ltd.
- ★ Ujjivan Small Finance Bank Ltd.
- ★ Utkarsh Small Finance Bank Ltd.

The primary objective of this study was to compute, compare and analyze the Asset-Liability Maturity Gap of Small Finance Banks in India in order to measure its liquidity risk. This study was undertaken on the basis of Asset-Liability guidelines issued by RBI. The major selected items of Assets and Liabilities have been segregated into time buckets as follows: 1-14 days, 15-28 days, 29-90 days to over 3 months, Over 3 months to 6 months, Over 6 months to 1 year, Over 1 year to 3 years, Over 3 years to 5 years and Above 5 years.

From the maturity profile of the banks, the Maturity Gap also known as Residual Maturity was calculated as follows:

Maturity Gap = Total Inflows-Total Outflows

= Rate Sensitive Assets (RSA)-Rate Sensitive Liabilities (RSL)

Rate Sensitive Assets (RSA) =Loans & Advances+Investments+Foreign Currency Assets

Rate Sensitive Liabilities (RSL) = Deposits+Borrowings+Foreign Currency Liabilities.

A positive maturity gap indicates that during that particular time bucket, the inflows were more than the outflows, whereas a negative maturity gap indicates that during that particular time bucket, the outflows were more than the inflows. Maturity gap as a percentage of total outflows was calculated to indicate the severity of the gap. The Cumulative Maturity Gap was calculated on the basis of the Maturity Gap of banks, so as to position the bank into the future. The time buckets 1-14 days and 15-28 days are indicators of short-term liquidity position. As per the RBI Guidelines, the Maturity Gap of Short-term liquidity indicator should not exceed 20% of the outflows of the respective time bucket.

Results and Discussions

Table 1: Maturity Gap of Small Finance Banks
Rs. in Crores.

Banks	1-14 days	15-28 days	29-90 days to over 3 months	Over 3 months to 6 months	Over 6 months to 1 year	Over 1 year to 3 years	Over 3 years to 5 years	Above 5 years
AU Small Finance Bank Ltd.	730.01	-559.30	-2802.07	-1620.40	-4052.02	2555.67	3653.19	3256.31
Capital Small	54.3302	-34.1523	305.51	-113.12	-146.31	533.52	320.55	-1426.97

Finance Bank Ltd.								
Equitas Small Finance Bank Ltd.	-534.08	-626.43	-1012.99	-933.91	-1056.18	403.04	1412.67	2514.35
ESAF Small Finance Bank Ltd.	-150.53	-161.84	-620.47	-406.65	403.67	-721.06	431.78	1274.85
Fincare Small Finance Bank Ltd.	135.13	-43.41	-4.48	-67.47	738.97	-928.58	-90.35	60.64
Jana Small Finance Bank Ltd.	39.60	-646.73	-570.02	3.62	810.03	-378.64	-269.18	1069.90
North East Small Finance Bank Ltd.	123.72	30.16	-22.99	-88.26	-1.43	400.12	-379.95	-0.07
Suryoday Small Finance Bank Ltd	11.13	-84.8	-8.11	160.35	368.86	-270.02	-146.18	195.58
Ujjivan Small Finance Bank Ltd.	-502.29	-54.56	-462.60	574.49	283.51	-1014.97	508.15	2374.31
Utkarsh Small Finance Bank Ltd.	-394.34	-215.21	-15.99	-81.00	599.35	115.09	-476.12	13.03

Source: Calculated

The above table (Table I) revealed the maturity gap position of the Small Finance Banks in India during 2019-2020 in different time buckets. An analysis of Liquidity position of the Banks for 1-14 days, 15-28 days, 29-90 days, 3-6 months shows its short-term liquidity position. From the above table it is clear that in the 1-14 days' time bucket, except ESAF Small Finance Bank Ltd, Ujjivan Small Finance Bank Ltd and Utkarsh Small Finance Bank Limited, all other showed excess liquidity. AU Small Finance Bank Showed highest positive gap. With regard to the 15-28 days bucket, out of the 10 banks taken for analysis 9 banks showed liquidity deficiency, whereas North East Small Bank Limited revealed excess liquidity (30.16 Crores). In the 29-90 days bucket, Capital Small Finance Bank Ltd. exhibited excess liquidity. In the 3-

6 months' time bucket Jana Small Finance Bank Ltd. Suryoday Small Finance Bank Ltd. and Ujjivan Small Finance Bank Ltd revealed positive maturity gaps. With respect to 6-12 months' time buckets, Jana Small Finance Bank Ltd. had the highest excess maturity. Thus, it could be concluded that Jana Small Finance Bank Ltd. and Fincare Small Finance Bank Ltd. had sound short-term liquidity.

In the 1-3 years' time bucket, AU Small Finance Bank Ltd. showed the highest positive gap. With regard to the 3-5 years' time bucket, AU Small Finance Bank Ltd. showed highest positive gap, followed by Equitas Small Finance Bank Ltd. Thus, it could be concluded that AU Small Finance Bank Ltd. maintained medium-term liquidity. Except Capital Small Finance Bank Ltd. and North East Small Finance Bank Ltd. all other banks had positive maturity gaps, the highest being that of AU Small Finance Bank Ltd. Thus, it maintained the highest long-term liquidity.

Table 2: Maturity Gap as a percentage of total outflow of Small Finance Banks Rs. in Crores.

Banks	1-14 days	15-28 days	29-90 days to over 3 months	over 3 months to 6 months	over 6 months to 1 year	Over 1 year to 3 years	Over 3 years to 5 years	Above 5 years
AU Small Finance Bank Ltd.	25.51	-57.66	-58.49	-33.76	-40.59	21.52	528.43	617.73
Capital Small Finance Bank Ltd.	25.20	-82.61	122.38	-41.54	-30.70	31.89	800.73	-75.14
Equitas Small Finance Bank Ltd.	-65.86	-171.85	-74.23	-46.72	-26.03	6.00	233.72	85522.11
ESAF Small Finance Bank Ltd.	-66.74	-100.00	-94.19	-34.66	18.42	-20.06	371.17	1167.98
Fincare Small Finance Bank Ltd.	79.53	-50.30	-1.50	-6.71	89.62	-28.68	-30.20	60.51
Jana Small Finance Bank Ltd.	6.17	-209.13	-50.37	0.24	37.13	-6.39	-41.78	467.57
North East Small	147.15	97.67	-72.69	-62.90	-0.64	56.87	-89.10	-31.22

Finance Bank Ltd.								
Suryoday Small Finance Bank Ltd	4.54	-89.38	-1.96	28.50	50.83	-14.80	-59.52	150446.15
Ujjivan Small Finance Bank Ltd.	-82.37	-13.70	-28.63	27.48	6.38	-19.13	190.90	96713.36
Utkarsh Small Finance Bank Ltd.	-80.70	-81.04	-3.26	-7.49	36.22	3.53	-73.84	29.91

Source: Calculated

The above table (Table 2) depicts the maturity gap position of Small Finance Banks during 2019-2020, in different time buckets as a percentage of outflows. As per the RBI guidelines, the mismatch during 1-14 days and 15-28 days' time bucket should not exceed 20% of cash outflows in each time bucket. It could be inferred from the above table that 6 out of 10 banks taken for study revealed excess liquidity in the 1-14 days' time bucket. In the case of a 15-28 days bucket, except North East Small Finance Bank Ltd., all other banks exhibited liquidity deficiency. The Capital Small Finance Bank Ltd., showed positive sign in liquidity management with respect to 29-90 days' time bucket.

In the case of 3-6 months' time bucket 3 out of 10 banks had excess liquidity positions, while in the 6-12 months' time bucket, Fincare Small Finance Bank Ltd., had the highest positive liquidity position. In the 1-3 years' time bucket, North East Small Finance Bank Ltd., had a good liquidity position. In the 3-5 years' time bucket, Capital Small Finance Bank Ltd., revealed the highest positive liquidity position. With regard to the Over 5 years' time bucket, 8 out of 10 banks had a positive liquidity position. Suryoday Small Finance Bank Ltd., had the highest positive liquidity position. This was due to the decline in liabilities (Deposits and Borrowings) of the Bank.

Table 3: Cumulative Maturity Gap of Small Finance Banks
Rs. in Crores.

Banks	**1-14 days**	**15-28 days**	**29-90 days to over 3 months**	**over 3 months to 6 months**	**over 6 months to 1 year**	**Over 1 year to 3 years**	**Over 3 years to 5 years**	**Above 5 years**
AU Small Finance Bank Ltd.	730.01	170.71	-2631.36	-4251.76	-8303.78	-5748.11	-2094.92	1161.39

Capital Small Finance Bank Ltd.	54.3302	20.1779	325.69	212.58	66.27	599.79	920.34	-506.63
Equitas Small Finance Bank Ltd.	-534.08	-1160.51	-2173.50	-3107.41	-4163.59	-3760.55	-2347.88	166.47
ESAF Small Finance Bank Ltd.	-150.53	-312.37	-932.84	-1339.49	-935.82	-1656.88	-1225.10	49.75
Fincare Small Finance Bank Ltd.	135.13	91.72	87.24	19.77	758.74	-169.84	-260.19	-199.55
Jana Small Finance Bank Ltd.	39.60	-607.13	-1177.15	-1173.53	-363.50	-742.14	-1011.32	58.58
North East Small Finance Bank Ltd.	123.72	153.88	130.89	42.63	41.21	441.33	61.37	61.31
Suryoday Small Finance Bank Ltd	11.13	-73.67	-81.78	78.57	447.43	177.41	31.23	226.81
Ujjivan Small Finance Bank Ltd.	-502.29	-556.85	-1019.45	-444.96	-161.45	-1176.43	-668.28	1706.03
Utkarsh Small Finance Bank Ltd.	-394.34	-609.55	-625.54	-706.54	-107.19	7.90	-468.22	-455.19

Source : Calculated

It could be inferred from the above table (Table 3) that in the 1-14 days' time bucket,4 out of 10 banks had liquidity deficiency. In the case of 15-28 days' time bucket, 6 out of 10 banks had liquidity deficiency. The North East Small Finance Bank Ltd. had a good liquidity position in both the short-term time period. The Au Small Finance Bank Ltd. revealed severe liquidity deficiency in the 29-90 days, 3-6 months and 6-12 months' time bucket. Whereas Fincare Small Finance Bank Ltd had a positive liquidity position during the same time period. Thus, it had good medium-term liquidity management. In the Over 5 years' time bucket, Ujjivan Small Finance Bank Ltd., had a good liquidity position. Whereas North East Small Finance Bank Ltd., had positive signs in liquidity management throughout all time periods.

Observations and Conclusion:

With the dawn of liberalization and globalization, the Indian Banking sector is exposed to more apprehensions and global competition. Thus Asset-Liability Management has become more crucial to maintain its profitability and liquidity position. Asset-Liability Management of Banks predominantly depends on the Maturity Profiling Model. In this present study, Gap Analysis was carried out for Small Finance Banks for the period 2019-2020. The Maturity Gap revealed that AU Small Finance Bank Ltd. had maintained its liquidity position in the Short-term, Medium-term, and Long-term time buckets. In the case of the Maturity gap as a percentage to total outflows, The North East Small Finance Bank Ltd., had performed better in the Short-term time bucket, Whereas Suryoday Small Finance Bank Ltd., had the highest positive liquidity position in the long-term time bucket. Cumulative Maturity Gap revealed that North East Small Finance Bank Ltd. had positive signs in liquidity management throughout all time periods. The Banks taken for the study had raised resources for financing their assets from short to long term, thus its liquidity risk amplified especially, during the period of crisis. With the opening of the Banking Sector to Global Players, Small Finance Banks have been compelled to expand profitability at the cost of liquidity. But it is advised that these banks should concentrate on the optimum liquidity risk it can be exposed to, as a high level of liquidity risk exposure will badly affect the profitability of Banks.

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