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A Study on Asset and Liability Management at ICICI Bank

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ABSTRACT

Asset and Liability Management (ALM) is a critical process in financial institutions, aimed at managing the risks that arise due to mismatches between the assets and liabilities. This study focuses on the ALM practices at ICICI Bank, one of India's largest private sector bank. The primary objective of this study is to understand the strategic framework and methodologies employed by ICICI Bank to balance its assets and liabilities effectively. The study involves an in-depth analysis of the bank's balance sheet, assessing the maturity profiles, interest rate sensitivity, and liquidity risk. Additionally, it examines the regulatory requirements and compliance measures that influence the bank's ALM policies.

***Key Words:** -Asset, Comparative statement, ICICI Bank, Liability, Management, Regulatory Compliance.*

1. INTRODUCTION

Asset liability Management (ALM) is a strategic approach of managing the balance sheet dynamics in such a way that the net earnings are maximized. This approach is concerned with management of net interest margin to ensure that its level and riskiness are compatible with the risk return objectives of the ICICI Bank Limited.

If one has to define Asset and Liability management without going into detail about its need and utility, it can be defined as simply "management of money" which carries value and can change its shape very quickly and has an ability to come back to its original shape with or without an additional growth. The art of proper management of healthy money is asset and liability management (ALM).

The Liberalization measures initiated in the country resulted in revolutionary changes in the sector. There was a shift in the policy approach of from the traditionally administered market regime to a free market driven regime. This has put pressure on the earning capacity of co- operative, which forced them to foray into new operational areas thereby exposing themselves to new risks.

Asset Liability Management is a portfolio management of assets and liability of an organization. This is a method of matching various assets with liabilities on the basis of expected rates of return and expected maturity patter.

In the context of ALM is defined as "a process of adjusting liability to meet loan demands, liquidity needs and safety requirements". This will result in optimum value of

At the same time reducing the risks faced by them and managing the different types of risks by keeping it within acceptable levels.

2.NEED FOR THE STUDY

The study of Asset and Liability Management (ALM) is of paramount importance to the banking industry, as it directly influences the financial health and stability of banks. In the dynamic and often volatile financial environment, banks must effectively manage the risks associated with mismatches in the maturity and interest rate profiles of their assets and liabilities. This study also provides insights into optimizing net interest margins, thereby enhancing profitability while maintaining a balance between risk and return. Furthermore, effective ALM is crucial for maintaining capital adequacy, ensuring that banks can withstand economic shocks and continue their operations seamlessly. By delving into the intricacies of ALM, this study aims to highlight its critical role in strategic planning and decision-making within the banking industry, ultimately contributing to the overall financial stability and sustainability of banks.

3.OBJECTIVES OF THE STUDY

1. To study the Assets and Liabilities position in ICICI Bank.

2. To study the concept of asset liability management in ICICI Bank.

3. To study the impact of Asset Liability Management on financial position of ICICI Bank.

4. To Evaluate Asset Liability Management practices in ICICI Bank by using

Comparative analysis.

5. To analyze the GAP arises due to the mismatch between assets and liabilities in

ICICI Bank.

4.SCOPE OF THE STUDY

In this study the analysis based on ratios to know asset and liabilities management and to analyze the growth and performance by using the calculations under asset and liability management based on ratio of the company. It covers both a prudential and component and an optimization role, within the limits of compliance.

The data is obtained from the ICICI Bank Limited for the purpose of Assets and liability. The information is gathered from different channels for a period of 45 days.

For the present study, the data pertaining to financial year 2017-2023 was collected.

5. REVIEW OF LITERATURE

Evans Tee (1991) "**Asset Liability Management and the Profitability of Listed Banks in Ghana"** Studied on the impact of asset and liability management on the profitability of listed banks in Ghana. Multiple linear regression has been applied by taking ROA as the dependent variable, and TAS (the total asset) and TLT (the total liability) representing the asset and liability mix of the banks as the independent variables together with gross domestic product and interest rates also representing the economic factors. The model used in this study hypothesized that the rate of return on earning assets is positive, and the rate of cost on liabilities is negative. The robust panel regression analysis with random effect result showed that total assets affects profitability positively, while total liabilities mainly saving and fixed deposits and other liabilities and credit balances have significant and negative effect on commercial banks profitability. With regard to the macroeconomic variables, interest rate had

no significant effect on commercial banks profitability. As a result, the study recommends that commercial banks should focus on increasing public awareness to mobilize more savings and fixed deposits and this will enhance their performance in their provision of loans and advances to customers.

Katarina Simons (2016) "Interest Rate Derivation and Asset and Liability Management" stated that "Interest rate derivations and Assets Liability Management by commercial banks" and stated that, Bank participation in currency, commodity, and equity contracts at U.S. commercial and saving banks soared from$6.8trillion in 1990 to $11.9 trillion in 1993, an increase of 75%. A major concern facing policymakers and bank regulators today is the possibility that the rising use of derivatives has increased the riskiness of individual banks and of the banking system as a whole. This study uses quarterly call report data to shed some light on pattern of derivate use by U.S. commercial banks.

P. Madhu Sudana Rao (2016) "Asset Liability Management of Banks and Financial Institutions" Studied on asset and liability management is the practice of managing various risks that arise due to mismatches between the assets and liabilities (loans and advances) of the bank. Bank face several risks such as the risks associated with assets, interest, currency exchange risks. Asset Liability management (ALM) is at tool to manage interest rate risk and liquidity risk faced by various banks, other financial services companies

Katarina Simons (1998) "Interest rate derivatives and asset liabilities management by commercial banks" focused on Bank participation in derivatives market has risen sharply in recent years. The total amount interest rate, currency, commodity, and equity contracts at US Commercial and saving banks board from $6.8 trillion in 1990 to $11.9 trillion in 1993, an increase of 75%. A major concern facing policy makers and bank regulatory today is the possibility that the rising use of derivatives has increased the riskiness of individual banks of the banking system as a whole.

Van Deventer, Imai and Meseler (2004) Studied on "Asset and liability management." Studied on asset liability management is the practice of managing risks that arises due to mismatches between asset and liabilities of the banks. This can be also seen in insurance. Modal portfolios for marking asset allocation recommendation. Consideration for income levels and other constraints figure into typical approach. However, not enough attention is given to the nature of a multicar time horizons and implication for cash flows. These are the future demand placed upon the portfolio. The risk that these demands will not the meet to be clearly understood in order to validate any asset allocation.

6. RESEARCH METHODOLOGY

The study of ALM Management is based on two factors.

1. Primary data collection.

2. Secondary data collection

6.1 PRIMARY DATA COLLECTION:

The sources of primary data were:

1. The chief manager– ALM cell
2. Department Sr. manager financing & Accounting
3. System manager- ALM cell

Gathering the information from other managers and other officials of the ICICI Bank Limited.

6.2 SECONDARY DATA COLLECTION:

Collected from books concerning journal, and control with info that is related about ALM along with other major sources were

a) Annual report of the ICICI Bank Limited

b) Published statement of the ICICI Bank Limited

c) RBI guidelines for ALM

6.3 TOOLS AND TECHNIQUES:

1. Ratio analysis
2. Trend analysis

3. Comparative analysis

6.4 LIMITATIONS OF THE STUDY

- This subject is based on past data of ICICI Bank Limited.
- The analysis is based on structural liquidity statement and gap analysis.
- The study is mainly based on secondary data.
- The study period of 45 days as prescribed by university.
- The study is limited up to the date and information provided by ICICI Bank Limited and its annual reports.

7. DATA ANALYSIS AND INTERPRETATION:

ALM is defined as "a process of adjusting liability to meet loan demands, liquidity needs and safety requirements". This will result in optimum value of at the same time reducing the risks faced by them and managing the different types of risks by keeping it within acceptable levels.

Table – 1 Comparative Statement for the Years 2022-23 to 2021-22

	2022-23	**2021-22**	**Increase (+) / Decrease (-) (in Rs)**	**Percentage (%)**
Liabilities				
Total Share Capital	23.2	23.2	0	0
Equity Share Capital	23.2	23.2	0	0
Share Application Money	3.19	3.19	0	0
Reserves	435.94	778.58	-342.64	-78.5979722
Net worth	462.33	804.97	-342.64	-74.11156533
Secured Loans	243.3	220.15	23.15	9.515002055
Unsecured Loans	0	26.34	-26.34	0
Total Debt	243.3	246.49	-3.19	-1.311138512
Total Liabilities	**705.63**	**1,051.46**	**-345.83**	**-49.01010445**

Assets				
Gross Block	536.86	518.26	18.6	3.464590396
Less: Accum. Depreciation	98.39	64.91	33.48	34.02784836
Net Block	438.47	453.35	-14.88	-3.39361872
Capital Work in Progress	77.09	22.31	54.78	71.05980023
Investments	185.94	860.14	-674.2	-362.5900828
Inventories	136.37	132.03	4.34	3.182518149
Sundry Debtors	21.09	39.97	-18.88	-89.52110005
Cash and Bank Balance	55.03	65.4	-10.37	-18.84426676
Total Current Assets	212.49	237.4	-24.91	-11.72290461
Loans and Advances	47.85	22.1	25.75	53.81400209
Total CA, Loans & Advances	260.34	259.5	0.84	0.32265499
Current Liabilities	237.25	528.89	-291.64	-122.9251844
Provisions	18.96	14.97	3.99	21.0443038
Total CL & Provisions	256.21	543.86	-287.65	-112.2711838
Net Current Assets	4.13	-284.36	288.49	6985.230024
Total Assets	**705.63**	**1,051.44**	**-345.81**	**-49.0072701**

INTERPRETATION

The total liabilities for the year are Rs.**705.63**Cr in the year of 2022-23. The investments are for the year Rs.**185.94**Cr. Therefore, the assets are less than the liabilities. So there is a Negative gap of Rs. **-674.2** i.e.-362.59 %.

Table – 2 Comparative Asset Liability Sheet for the Years 2021-22 to 2020-21

	2021-22	**2020-21**	**Increase (+) / Decrease (-) (in Rs)**	**Percentage (%)**
Liabilities				
Total Share Capital	23.2	23.2	0	0
Equity Share Capital	23.2	23.2	0	0
Share Application Money	3.19	3.19	0	0
Reserves	778.58	751.62	26.96	3.462714172
Net worth	804.97	778.01	26.96	3.349193138
Secured Loans	220.15	221.12	-0.97	-0.440608676
Unsecured Loans	26.34	19.42	6.92	26.27182992
Total Debt	246.49	240.54	5.95	2.41389103
Total Liabilities	**1,051.46**	**1,018.55**	**32.91**	**3.129933616**
Assets				
Gross Block	518.26	448.75	69.51	13.41218693
Less: Accum. Depreciation	64.91	32.77	32.14	49.51471268
Net Block	453.35	415.98	37.37	8.243079299

Capital Work in Progress	22.31	8.73	13.58	60.86956522
Investments	860.14	1,018.12	-157.98	-18.3667775
Inventories	132.03	150.52	-18.49	-14.00439294
Sundry Debtors	39.97	10.1	29.87	74.73104829
Cash and Bank Balance	65.4	61.03	4.37	6.681957187
Total Current Assets	237.4	221.65	15.75	6.634372367
Loans and Advances	22.1	20.94	1.16	5.248868778
Total CA, Loans & Advances	259.5	242.59	16.91	6.516377649
Current Liabilities	528.89	653.98	-125.09	-23.6514209
Provisions	14.97	12.89	2.08	13.89445558
Total CL & Provisions	543.86	666.87	-123.01	-22.61795315
Net Current Assets	-284.36	-424.28	139.92	-49.2052328
Total Assets	**1,051.44**	**1,018.55**	**32.89**	**3.128090999**

INTERPRETATION

The total liabilities for the year are Rs.1051.46Cr in the year of 2021-22. The investments are for the year Rs.860.14Cr. Therefore, the assets are less than the liabilities. So there is a Negative gap of Rs. -157.98 Cr.i.e.-18.37%.

Table – 3 Comparative Asset Liability Sheet for the Years 2020-2021 TO 2019-20

	2020-2021	**2019-2020**	**Increase (+) / Decrease (-) (in Rs)**	**Percentage (%)**
Liabilities				
Total Share Capital	23.2	23.2	0	0
Equity Share Capital	23.2	23.2	0	0
Share Application Money	3.19	0	3.19	100
Reserves	751.62	570.02	181.6	24.16114526
Net worth	778.01	593.22	184.79	23.75162273
Secured Loans	221.12	109.65	111.47	50.41154124
Unsecured Loans	19.42	25	-5.58	-28.73326468
Total Debt	240.54	134.65	105.89	44.02178432
Total Liabilities	**1,018.55**	**727.87**	**290.68**	**28.53860881**
Assets				
Gross Block	448.75	296.84	151.91	33.85181058
Less: Accum. Depreciation	32.77	16.93	15.84	48.3368935
Net Block	415.98	279.91	136.07	32.71070725
Capital Work in Progress	8.73	8.52	0.21	2.405498282

Investments	1,018.12	477.46	540.66	53.10375987
Inventories	150.52	116.49	34.03	22.60829126
Sundry Debtors	10.1	11.29	-1.19	-11.78217822
Cash and Bank Balance	61.03	45.97	15.06	24.67638866
Total Current Assets	221.65	173.75	47.9	21.61064742
Loans and Advances	20.94	26.29	-5.35	-25.54918816
Total CA, Loans & Advances	242.59	200.04	42.55	17.53988211
Current Liabilities	653.98	227.18	426.8	65.26193462
Provisions	12.89	10.88	2.01	15.59348332
Total CL & Provisions	666.87	238.06	428.81	64.30188792
Net Current Assets	-424.28	-38.02	-386.26	91.03893655
Total Assets	**1,018.55**	**727.87**	**290.68**	**28.53860881**

INTERPRETATION

The total liabilities for the year are Rs.1018.55Cr in the year of 2020-21. The investments are For the year Rs.1018.12Cr. Therefore, the assets are less than the liabilities. So there is a Negative gap of Rs. -0.43 Cr.i.e.-0.01 %.

Table – 4 Comparative Asset Liability Sheet for the Years 2019-2020 TO 2018-2019

	2019-2020	**2018-2019**	**Increase (+) / Decrease (-) (in Rs)**	**Percentage (%)**
Liabilities				
Total Share Capital	23.2	23.2	0	0
Equity Share Capital	23.2	23.2	0	0
Share Application Money	0	0	0	0
Reserves	570.02	216.79	353.23	61.96800112
Net worth	593.22	239.99	353.23	59.54451974
Secured Loans	109.65	103.95	5.7	5.198358413
Unsecured Loans	25	1.15	23.85	95.4
Total Debt	134.65	105.1	29.55	21.94578537
Total Liabilities	**727.87**	**345.09**	**382.78**	**52.58906123**
Assets				
Gross Block	296.84	504.99	-208.15	-70.12195122
Less: Accum. Depreciation	16.93	192.96	-176.03	-1039.75192
Net Block	279.91	312.03	-32.12	-11.475117
Capital Work in Progress	8.52	0	8.52	100
Investments	477.46	0.98	476.48	99.7947472
Inventories	116.49	144.91	-28.42	-24.39694394
Sundry Debtors	11.29	28.79	-17.5	-155.0044287

Cash and Bank Balance	45.97	45.23	0.74	1.609745486
Total Current Assets	173.75	218.93	-45.18	-26.0028777
Loans and Advances	26.29	33.41	-7.12	-27.08254089
Total CA, Loans & Advances	200.04	252.34	-52.3	-26.14477105
Current Liabilities	227.18	208.5	18.68	8.222554802
Provisions	10.88	21.34	-10.46	-96.13970588
Total CL & Provisions	238.06	229.84	8.22	3.452911031
Net Current Assets	-38.02	22.5	-60.52	159.1793793
Total Assets	**727.87**	**335.51**	**392.36**	**53.90523033**

INTERPRETATION

From the above table and graph Total Liabilities are increased compared to 2019-20. In 2019-20 Liabilities are Rs. 727.87 Cr. Investments also high increased form 2018- 2019 around 99% investment increased. In the year of 2018-19 investment only 0.98 Cr. But 2019-20 Investment 477.46 Cr. Loans and Advances 27.08 % decreased and inventories also 24% decreased compared to 2017-18.

Table – 5 Comparative Asset Liability for the Years 2018-19 TO 2017-2018

	2018-2019	**2017-2018**	**Increase (+) / Decrease (-) (in Rs)**	**Percentage (%)**
Liabilities				
Total Share Capital	23.2	23.2	0	0
Equity Share Capital	23.2	23.2	0	0
Reserves	216.79	169.81	46.98	21.67074127
Net worth	239.99	193.01	46.98	19.57581566
Secured Loans	103.95	142.48	-38.53	-37.06589707
Unsecured Loans	1.15	0	1.15	100
Total Debt	105.1	142.48	-37.38	-35.5661275
Total Liabilities	**345.09**	**335.49**	**9.6**	**2.781882987**
Assets				
Gross Block	504.99	449.92	55.07	10.90516644
Less: Accum Depreciation	192.96	169.27	23.69	12.27715589
Net Block	312.03	280.65	31.38	10.05672531
Capital Work in Progress	0	9	-9	
Investments	0.98	0.98	0	0
Inventories	144.91	139.37	5.54	3.823062591
Sundry Debtors	28.79	24.24	4.55	15.80409865
Cash and Bank Balance	45.23	40.68	4.55	10.05969489
Total Current Assets	218.93	204.29	14.64	6.687068926
Loans and Advances	33.41	30.91	2.5	7.482789584

Total CA, Loans & Advances	252.34	235.2	17.14	6.792422921
Current Liabilities	208.5	174.1	34.4	16.49880096
Provisions	21.34	16.23	5.11	23.94564199
Total CL & Provisions	229.84	190.33	39.51	17.19021928
Net Current Assets	22.5	44.87	-22.37	-99.42222222
Total Assets	335.51	335.5	0.01	0.002980537

INTERPRETATION

From the above table and graph Total Liabilities Are Increased from 2018-19. i.e. 335.49 Cr

To 345.09 Cr. And investment, loans and advances are also increased from 208-19.

Table- 6 GAP ANALYSIS

Gap= Rate sensitivity Assets-Rate sensitivity liabilities

Years	**2022- 2023**	**2021- 2022**	**2020- 2021**	**2019- 2020**	**2018- 2019**	**2017- 2018**
Total Rate Sensitivity Assets	47.85	22.1	20.94	26.29	33.41	30.91
Total Rate Sensitivity Liabilities	243.3	246.49	240.54	134.65	105.1	142.48
Gap Analysis	-195.45	-224.39	-219.6	-108.36	-71.69	-111.57

INTERPRETATION

The above table shows Rate sensitivity Gap of ICICI Bank during 2022-2023 to 2018-

2017.In the year of 2021-2022 there is a high negative gap i.e. (- 224.39) when compared to other years.

8. FINDINGS

- The total liabilities for the year are Rs.705.63Cr in the year of 2022-23. The investments are for the year Rs.185.94Cr. Therefore, the assets are less than the liabilities. So there is a Negative gap of Rs. -674.2 i.e.-362.59 %.
- The total liabilities for the year are Rs.1051.46Cr in the year of 2021-22. The investments are for the year Rs.860. 14Cr.Therefore the assets are less than the liabilities. So there is a Negative gap of Rs. -157.98 Cr.i.e.-18.37 %.
- The total liabilities for the year are Rs.1018.55Cr in the year of 2020-21. The investments are for the year Rs.1018.12Cr. Therefore, the assets are less than the liabilities. So there is a Negative gap of Rs. -0.43 Cr.i.e.-0.01 %.
- Total Liabilities are increased compared to 2019-20. In 2019-20 Liabilities are Rs. 727.87 Cr. Investments also high increased form 2018-2019 around 99% investment increased. In the year of 2018-19 investment only 0.98 Cr. But 2019-20 Investment 477.46 Cr. Loans and Advances 27.08 % decreased and inventories also 24% decreased compared to 2017-18.
- Table and graph Total Liabilities Are Increased form 2018-19. i.e 335.49 Cr. to 345.09Cr. And investment, loans and advances are also increased from 208-19.
- Rate sensitivity Gap of ICICI Bank during 2022-23 to 2018-17. In the year of 2021-22, there is a high negative gap i.e. (-224.9) when compared to other years.

9. SUGGESTIONS

- They should strengthen its management information system (MIS).
- Computer processing capabilities for accurate measurement of liquidity and interest rate Risks in their Books.
- In the short term the Net interest income or Net interest margins (NIM) creates economic value of the which involves up gradation of existing systems & Application software to attain better & improvised levels.
- It is essential that remain alert to the events that effect its operating environment & react accordingly in order to avoid any undesirable risks.

- ICIC bank requires efficient human and technological infrastructure which will future lead to smooth integration of the risk management process with effective business strategies.

CONCLUSION

The purpose of ALM is not necessarily to eliminate or even minimize risk. The level of risk will vary with the return requirement and entity's objectives. Financial objectives and risk tolerances are generally determined by senior management of an entity and are reviewed from time to time. All sources of risk are identified for all assets and liabilities. Risks are broken down into their component pieces and the underlying causes of each component are assessed. Relationships of various risks to each other and/or to external factors are also identified.

Risk exposure can be quantified 1) relative to changes in the component pieces, 2) as a maximum expected loss for a given confidence interval in a given set of scenarios, or 3) by the distribution of outcomes for a given set of simulated scenarios for the component piece over time. Regular measurement and monitoring of the risk exposure is required. Operating within a dynamic environment, as the entity's risk tolerances and financial objectives change, the existing ALM strategies may no longer be appropriate. Hence, these strategies need to be periodically reviewed and modified. A formal, documented communication process is particularly important in this step.

REFERENCE

Title of the Books:

- Khurana, S.K (2000)" Assets and Liability Management ", GG skylark publications, New Delhi.
- Guru moorthy T.R. (2004)" Analysis of income and expenditure in banks", Business and Economic facts for you, June, pp27-31.
- Raghavan R.S. (2005)" Risk Management an overview", in S.B. Verma (ed.) Risk Management, Deep and Deep publications Pvt.ltd, New Delhi, pp-321.

JOURNAL:

- Karinan R, Adityal Narayan and Saibal Ghosh (2001)," Determinants of Net Interest Margin under regulatory requirement, an Econometric Study, PW" VOI XXVI NO, 4Jan27., pp,337-334.
- Chaudhary, Sumitra (2002) Some issues of Growth and Profitability in Indian Public Sector Banks EPW VOI, XXXVII NO.22, June 1,2017.
- Maher Dash, Journal of Applied Management and Investments, vol2, Issue 4,2013.
- Journal of Economics and Finance, Volume 8, Issue 3 Ver. IV (May – June 2018), PP 09-15.
- The Jahangir Nagar Journal of Finance & Banking Vol 4, 5 & 6, June 2019.
- Amit Kumar Meena, JoydipDhar International Journal of Social, Human Science and Engineering Vol:8 No:1, 2015.
- Prof. Dr. Kanhaiya Singh Journal of Management & Research, May 2013, Volume 7, Issue 2/4,