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A STUDY ON IMPACT OF ASSET-LIABILITY MANAGEMENT ON THE LIQUIDITY AND PROFITABILITY OF SELECTED COMMERCIAL BANKS IN INDIA

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Abstract

The technique of Asset-Liability-Management (ALM) is an inclusive and active basis for measuring,checking and handling the market risk of a bank. It is the management of balance sheet structure (Asset-Liability) in such a way that the net incomes from interest are maximized within the overall risk-preference of the banks.Asset-Liability-Management (ALM) indicates the capacity of earning profits by the banks and the financial soundness of the banks. A lot of studies have been conducted in area of Asset-Liability-Management (ALM) and its impact on profitability position of Indian and as well as the foreign banks. But, there are no remarkable researches have been conducted in the area of Asset-Liability-Management (ALM) and its impact on the liquidity and profitability of Indian commercial banks. So, this is an attempt to study the impact of Asset-Liability-Management (ALM) on the liquidity and profitability of selected commercial bank in India. The study is based on secondary data. The secondary data have been collected through well designed strategy and these have been collected from various e-journals, e-magazines, e-annual reports of commercial banks and RBI website and from various reputed websites. The collected data have been classified and tabulated according to the requirements of the study. There are various tools like percentage calculations; valid percentage calculation, comparative statement analysis and ratios analysis have been used for analysis and interpretations of results. It is found that ALM is a successful tool for risk management. It provides the necessary framework to define measures, monitor, modify and manage these risks.

Keywords: *ALM**,** Asset, Liability, profitability ,Liquidity, Risks in Banks.*

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I. INTRODUCTION:

The commercial banking sector plays an important role in mobilization of deposits and disbursement of credit to various sectors of the economy. A sound and efficient banking system is a prerequisite for maintaining financial stability. The financial strength of individual banks, which are major participants in the financial system, is the first line of defense against financial risks. The banking industry in India is undergoing transformation since the beginning of liberalization. Banks in India are venturing into non-traditional areas and generating income through diversified activities other than the core banking activities. There have been new banks, new instruments, new windows, new opportunities and, along with all this, new challenges. While deregulation has opened up new vistas for banks to augment revenues, it has entailed greater competition, reduced margins and consequently greater risks.

ALM is managing infrastructure asset to minimize the total cost of owning and operating them while continuously delivering the service levels customers' desire. It refers to a systematic process of effectively maintaining, upgrading and operating assets, combining engineering principles with sound business practice and economic rational and providing the tools to facilitate a more organized and flexible approach for making decision necessary to achieve expectations of stake holders and the public. It involves the management of assets, such as investments or property. Liability management is the flip side of the coin the management of debts, loans and mortgages. The Reserve Bank of India (RBI) has implemented the Basel II norms for the regulation of Indian banks, providing a framework for banks to develop ALM policies. At the macro-level, ALM leads to the formulation of critical business policies, efficient allocation of capital, and designing of products with appropriate pricing strategies, while at the micro-level, the objective of the ALM is two-fold: it aims at profitability through price matching while ensuring liquidity by means of maturity matching. An effective ALM technique aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of the assets and liabilities as a whole so as to attain a predetermined acceptable risk-reward ratio. The purpose of ALM is to enhance the asset quality, quantify the risks associated with the assets and liabilities and further manage them, in order to stabilize the short-term profits, the long-term earnings and the long-run sustenance of the bank.

II. REVIEW OF LITERATURES:

Singh, A., andTandon, P. (2012) Asset-Liability Management (ALM) is one of the important tools of risk management in commercial banks of India. The banking industry of India is exposed to number of risk prevailed in the market. The research paper discusses about issues in asset liability management.

Shetty,Chetan,Patel, P. and Nandini (2016) Assets and Liability Management (ALM) is a systematic and dynamic process of planning, organising, coordinating and controlling the assets and liabilities or in the sense management ofbalance sheet structure in such a way the net earnings from interest are maximised within the overall risk preference of the banks. This study examined the effect of ALM on the Five Private Sector Banks profitability in Indian financial market by using Gap Analysis and Ratio Analysis Technique. The finding from the study revealed that banks have been exposed to liquidity risk.

Uddin, S.andHaque, A. (2016) There is no underlying fact to ignore the importance of asset-liability management policy to ensure profitability and long-run sustainability of financial institutions in any economy. The study has been conducted to investigate the impacts of ALM policy on the profitability of sample banks working in Bangladesh. The rationality of this study is to observe the degree of relationship of different assets and liability variables with profitability through applying Statistical Cost Accounting (SCA) model using time series data from 2003 to 2014. To identify the relationship among the variables. After analysis, Loans & Advances is found to have a significant positive relationship with banks' profitability.

Prabhakar, Mathivannan, S andKumar, A.(2017) In India asset liability of the banks' balance sheet of commercial banks posed serious challenges as the banks, which have direct impact on their operations, profitability and efficiency to compete with. The RBI of the country focused and advised banks for taking concrete steps in minimizing the mismatch in the asset-liability management. There had been many positive impacts of various strategies followed by banks in the last one decade.

Antony, P. P. and Manimegalai (2018) studied the assets and liabilities in banks and evaluate the impact of Asset Liability Management on profitability of banks were using Ratio Analysis. The analysis of Asset Liability Management in Indian bank will be carried out for the sample period from 2014 to 2018. They concluded that ALM provides the necessary framework to define measures, monitor, modify and manage these risks.

OBJECTIVES OF THE STUDY:

- To Study the Assets and Liabilities in Banks.
- To evaluate the impact of Asset Liability Management on liquidity and profitability of selected Indian commercial banks.

III. RESEARCH METHODOLOGY:

- **Period of Study:** January 2020 to Jun 2020.
- **Method of data Collection:** This present study is based on secondary data.
- **Sample Size:** The sample data size consists of Annual Reports of selected commercial banks from FY 2015-16 to 2019-20.
- **Sources of Secondary Data:**The secondary data have been collected through well designed strategy and these have been collected from various e-journals, e-magazines, e-annual reports of commercial banks and RBI website and from various reputed websites.The collected data have been classified and tabulated according to the requirements of the study.
- **Statistical Tools:**There are various tools like percentage calculations; valid percentage calculation, comparative statement analysis and ratios analysis have been used for analysis and interpretations of results.

IV. DATA ANALYSIS:

The multivariate statistical technique and Ratio analysis was used to interpret the financial statements and analyze the data

The calculations are based upon the following formulas,

- Current Ratio = Total Current Assets/ Total Current Liabilities
- Quick Ratio = (Cash + accounts receivables + marketable securities)/ Total Current Liabilities
- Quick Assets = Quick Assets / Total Current
- Credit Deposit Ratio : Total advances / Customer Deposits (i.e. Total Deposits minus Inter Bank Deposits)
- Earnings per Share : Net Income – Dividends on preferred stock / Average outstanding shares
- Capital Adequacy ratio= (Tier one capital + tier two capital)/Risk Weighted Assets
- Operating margin = Operating income/ Net sales
- Gross profit margin= (Revenue - COGS)/Revenue
- Net profit margin= (Net Income after Taxes ÷ Revenue)

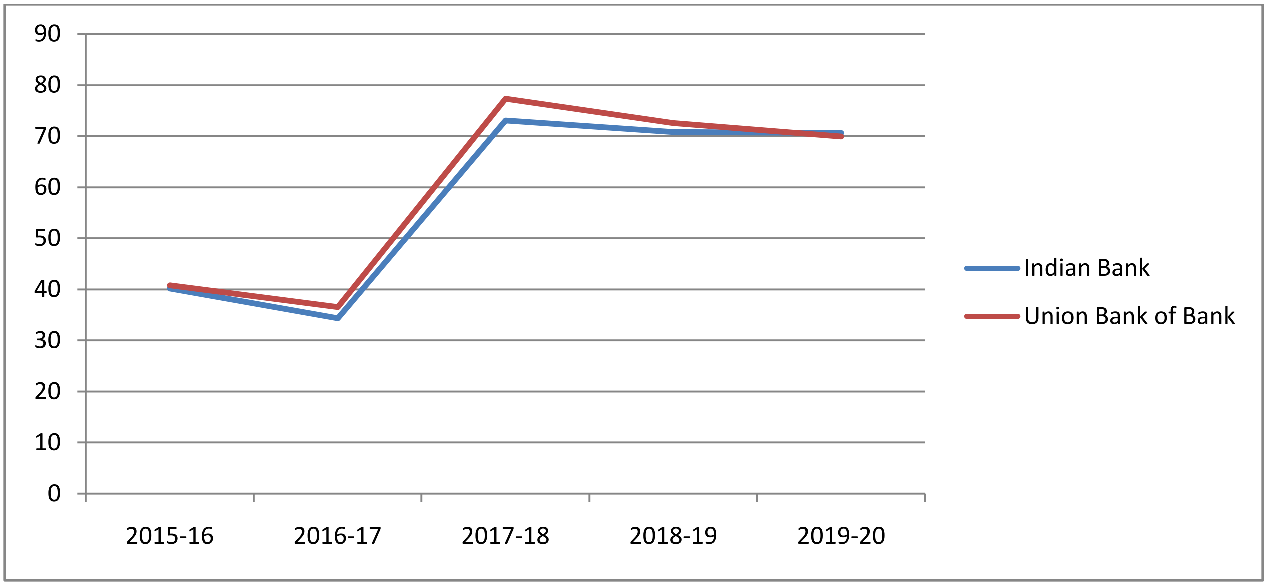
ANALYSIS OF CREDIT DEPOSIT RATIO

Table No. 1: Analysis of Credit Deposit Ratio

BANKS/YEARS	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Indian Bank	40.17	34.37	73.07	70.81	70.65
Union Bank of Bank	40.81	36.55	77.32	72.56	69.91

(Source: Secondary Data)

Fig. No. 1: Analysis of Credit Deposit Ratio



(Source: Author's Calculation and Interpretation)

The figure No. 1 shows the Credit deposit ratio is the ratio with which it could be analyzed of how much a bank lends out of the deposits it has mobilized. It indicates how much of a bank's core funds are being used for lending, the main banking activity. The ratio gives the first indication of the financial health of the bank. Thus it can be inferred that Union bank of India is more healthy than when compared to Indian bank from the credit deposit ratio point of view.

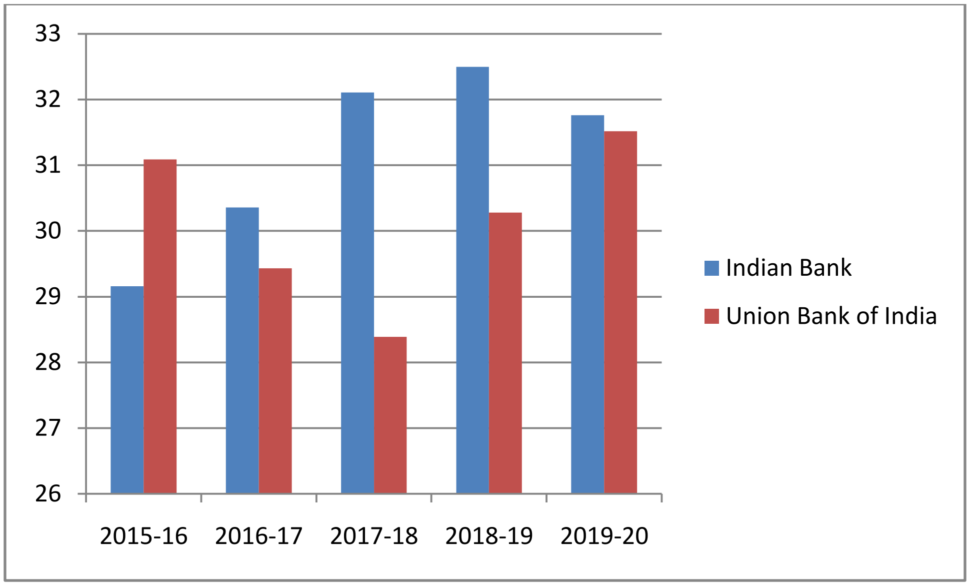
ANALYSIS OF INVESTMENT DEPOSIT RATIO

Table No. 2: Analysis of Investment Deposit Ratio

BANKS/YEARS	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Indian Bank	29.16	30.36	32.11	32.5	31.76
Union Bank of India	31.09	29.43	28.39	30.28	31.52

(Source: Secondary Data)

Fig. No. 2: Analysis of Investment Deposit Ratio



(Source: Author's Calculation and Interpretation)

The Figure No. 2 shows the Investment deposit ratio basically gives information about how the bank is using their deposits, into better investment outcomes so that their can earn higher rate of interest. Thus it can be inferred that Indian bank is performing well when compared to that of the Union bank of India from the point of Investment deposit ratio.

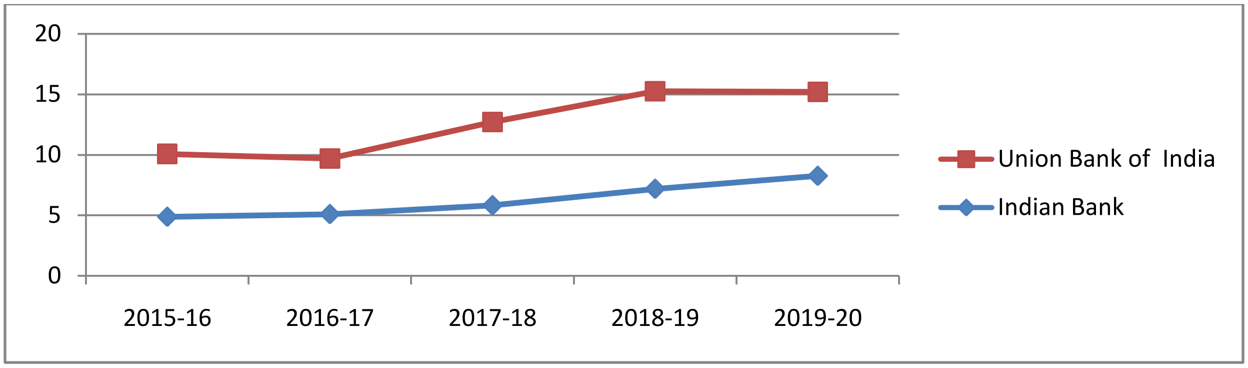
ANALYSIS OF CASH DEPOSIT RATIO

Table No. 3: Analysis of CashDeposit Ratio

BANKS/YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
Indian Bank	4.87	5.09	5.82	7.18	8.25
Union Bank of India	5.2	4.6	6.88	8.07	6.95

(Source: Secondary Data)

Figure No. 3: Analysis of Cash Deposit Ratio



(Source: Author's Calculation and Interpretation)

The table no. 3 and the figure no. 3 show the Cash Deposit ratio depicts the amount of money a bank should have as a percentage of the total amount of money its customers have paid into the bank. This amount is calculated so that customers can be sure that they will be able to take their money out of the bank if they want to. Thus it can be stated that union bank is maintaining a higher cash reserve ratio when compared with Indian Bank. This trend is in fact well maintained by both the banks indicating the healthy state of both the banks and the effective utilization of the funds, which is in fact a positive sign.

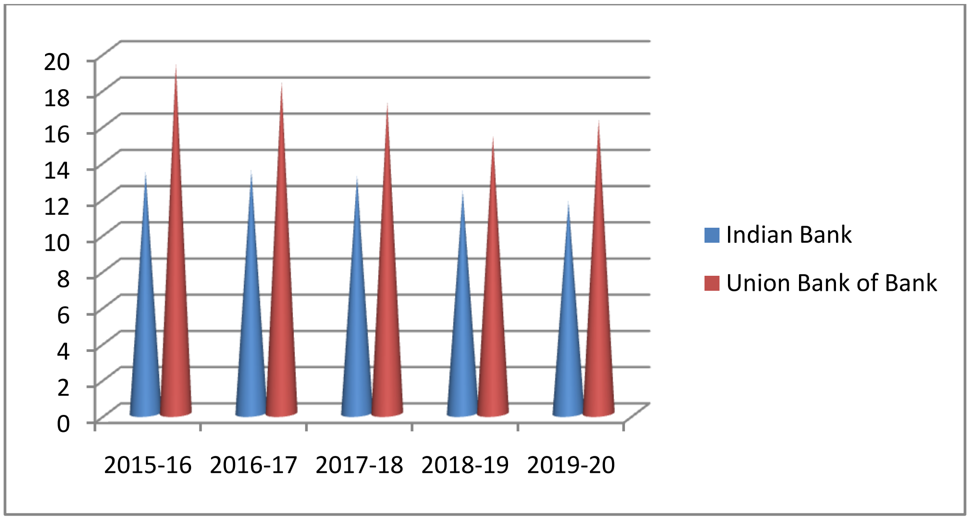
ANALYSIS OF TOTAL DEBT TO OWNERS FUND:

Table No. 4: Analysis of Total Debt to Owners Fund

BANKS/YEARS	2015-16	2016-17	2017-18	2018-19	2019-20
Indian Bank	13.33	13.4	13.12	12.3	11.7
Union Bank of Bank	19.31	18.28	17.17	15.35	16.22

(Source: Secondary Data)

Figure No. 4: Analysis of Total Debt to Owners Fund



(Source: Author's Calculation and Interpretation)

The table no 4 and Figure No. 4 show the Total Debt to Owners Fund is a measurement of a bank's financial leverage. From the above analysis it is stated that in comparison between Indian bank and union bank of India total debt to owners fund is lower in Indian bank compared to union bank of India, which indicates the risk factor to the lenders is less in the case of Union Bank.

ANALYSIS OF PROFITABILITY RATIOS:

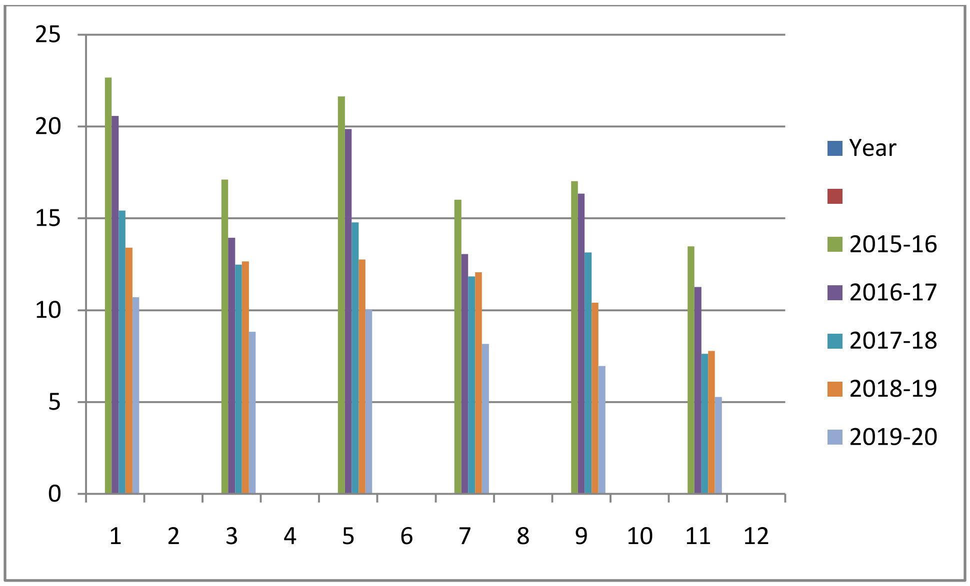
Table No. 5: Analysis of Profitability Ratio

Year	Operating Margin %		Gross profit Margin %		Net profit margin%	
	Indian Bank	Union Bank	Indian Bank	Union Bank	Indian Bank	Union Bank
2015-16	22.67	17.11	21.64	16.02	17.03	13.47
2016-17	20.58	13.94	19.86	13.06	16.35	11.27
2017-18	15.42	12.49	14.78	11.84	13.14	7.63
2018-19	13.41	12.66	12.76	12.06	10.41	7.79
2019-20	10.71	8.82	10.02	8.16	6.97	5.27
Mean	**16.55**	**13**	**15.81**	**12.22**	**12.78**	**9.08**

Standard deviation	**4.97**	**2.98**	**4.85**	**2.81**	**4.19**	**3.25**
Coefficient of variation	**24.73**	**8.9**	**23.56**	**7.94**	**17.57**	**10.58**

(Source: Secondary Data)

Figure No. 5: Analysis of Profitability Ratio



(Source: Author's Calculation and Interpretation)

The table no. 5 and figure no. 5 show the A profitability ratio tells how good a company is converting business operations into profits. Profit is a key driver of stock price, and it is undoubtedly one of the most closely followed metrics in business, finance and investing. The more the bank is profitable the less would be the risk for the investors as it is a comparative study it can be concluded that Indian bank is more profitable than Union bank of India.

V. CONCLUSIONS:

Asset-Liability Management is today concerned as a strategic management of assets (uses of funds) and liabilities (sources of funds) of banks, against the risk exposed due to the changing liquidity position in the bank, interest rates and exchange rates, and against credit risk and contingency risk. Financial services in India has been witnessing a significant changes specially after the post- liberalization period, there has been a vast shift in the borrowers profile, the industry profile accompanied by the increase market volatility, diversification of the banks product profile and intensified competition between the public and private banks in India, all is adding to the increased risk exposed by of the banks in India. Thus, banks today need to match their maturities between their assets and liabilities and at the same time balancing their objectives of profitability, Liquidity and risk. After calculating the various ratios and criticallyanalyzing them, it is evident that both banks are performing satisfactorily in terms of profitability and adequacy, but they are needs to address the immediate concern of liquidity. On critical comparison between Indian bank and Union bank, we are concluding that Indian bank is more profitable with good Asset-Liability Management strategy.

REFERENCES:

1. Dr. Anurag B Singh; Ms. PriyankaTandon (2012), "Asset - Liability Management in Indian Banking Industry", "Asia Pacific Journal of Marketing & Management Review" Vol.1 No. 3, November 2012, ISSN 2319-2836, pp. 121-132.
2. SalvinSurjith FP* N. Sathyanarayana (2014), "A Study on Asset and Liability Management in ICICI Bank", International Journal of Advanced Research in Management and Social Sciences, ISSN: 2278-6236 Vol. 3 | No. 7 | July 2014, pp. 20-33
3. P. Sheela and TejaswiniBastray (2015), International Research Journal of Business and Management (IRJBM) Volume No – VIII, January – 2015, Issue – 1, pp.33-43
4. Dr. Md. SalimUddin&AnamulHaque (2016), The Cost and Management, ISSN 1817-5090, vol-44, no-4, July.
5. International Journal of Research in IT and Management (IJRIM) Vol. 6, Issue 10, October - 2016, pp. 92~98.
6. Imperial journal of interdisciplinary research Vol-3, Issue-6, 2017 ISSN: 2454-1362, http://www.onlinejournal.in
7. www.indian bank.com