Newspaper Articles


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3.1 Introduction

The banking sector being the backbone of the economy, social orientation of banking had been considered essential for the planned economic development of India. It is with this acknowledged aim that the Bank Nationalization was initiated in 1969. After Nationalization Indian banking system, with a large network of branches and wide range of financial instruments, has achieved considerable progress in the two decades. The concept of banking had undergone a dynamic change in keeping with the needs to achieve rapid socio-
economic progress. We have also noticed a considerable shift in the approach of lending from security orientation to purpose orientation as compared to traditional banking. Despite of overall progress poor capital base, inefficient organization structure, declining profitability and growing non-performing assets had become the major hindrances in the development during post nationalization period.

The banking sector has undergone far reaching changes since the year 1991 when the Narasimham Committee presented its report on Banking Sector Reform. The highlight of the report was the insight that the balance sheet of a bank was to reflect its actual financial health, a proper system for recognition of income, classification of assets ad provisioning for bad and doubtful debts on a prudential basis. The reform gave emphasis on easing of policy frame work in terms of administrated structure of interest rates, high level of pre-emption in the form of reserve requirements and credit allocation to certain sectors, introduction of prudential norms and regulations aimed at ensuring the safety and soundness of the financial system.

3.2 Review Of The Existing Literature

There has been good number of studies and plenty of literature relating to asset- liability management in banks is available.

Prof. (Dr) Kanhaiya Singh (1), He has found that there are serious attempts by banks to minimize the asset liability mismatch since the implementation of RBI guidelines in 1997. Banks have made adequate follow up and monitoring
arrangements at different levels. The study suggests much scope for banks to improve profitability by monitoring and reducing short term liquidity. The further break up of data into smaller rime buckets indicates negative gap. To fill the short term liquidity gap, banks resort to market borrowings at higher rate of interest which reduces interest margin and profitability of banks. Banks have greater scope to manage interest rate risk through various techniques.

The Basel II norms (2004) (2), focused on international standard for the amount of capital to be maintained by banks as a safeguard against various risks they come across in the banking business. Basel II proposed setting up rigorous risk and capital management requirements designed to ensure that a bank holds capital reserves appropriate to the risk the bank exposes itself to through its leading and investment practices. It infers that the greater risk to which the bank is exposed, the greater the amount of capital the bank needs to hold to ensure solvency and stability.

Charumathi (2008) (3), She has studied assets and liabilities management of banking sectors, she focused on financial statement of banks and impact of interest rate. She has evaluated interest rates which create liquidity risk. in her study on interest rate risk management concluded that balance sheet risks include interest rate and liquidity risks.

Rajan and Nallari (2004) (4) used canonical analysis to examine asset-liability management in Indian banks in the period 1992-2004. According to this study, SBI and associates had the beat asset-liability management in the period 1992-2004. They also found that, other than foreign banks, all other banks could be said to be liability-managed. Private sector banks were found to be aggressive in profit generation, while nationalized banks were found to be excessively concerned about liquidity.
Vaidya and Shahi (5), studies asset-liability management in Indian banks. They suggested in particular that interest rate risk and liquidity risk are two key inputs in business planning process of banks. A linear programming model for assessing asset liability management in banks,- ICFAI Journal of risk management, year-2011

Pathak, A. & Goshal, S.N. (2007) (6), proposed a linear model for asset-liability assessment. They found that public sector banks have best asset-liability management positions, maintaining profitability, satisfying the liquidity constraints, and reducing interest rate risk exposure. The present study analyses the impact of RBI guidelines on effective management of ALM in banks.

Vaidyanathan (1999) (7), discussed many issues in Indian context in asset-liability management and elaborates on various categories of risk that require to be managed by banks. Indian banks in the initial stages were primarily concerned about adhering to statutory liquidity ratio norms; but in the post liberalization era where banks moved away from administered interest rate structure to market determined rates, it became important for banks to prepare themselves with some of these techniques, in order to immunize themselves against interest rate risk. Vaidyanathan concludes that the problem gets accentuated in the context of change in the main liability structure of the banks, namely the maturity period for term deposits

Haslem, J. A., Scheraga, C.A. and Bedingfield (8). used canonical analysis and the interpretive framework of asset/liability management in order to identify and interpret the foreign and domestic balance sheet strategies of large U.S. banks in the context of the “crisis in lending to LDCs.” In their study it was
revealed that the least profitable very large banks have the largest proportion of foreign loans, but they focus on asset/liability matching strategies.

**Dr. R Umarani & M Jayanthi (9)** Asset-Liability Management (ALM). ALM is an attempt to match the assets and liabilities in terms of their maturities and interest rates sensitivities so that the risk arising from such mismatches – mainly interest rate risk and liquidity risk- can be contained within the desired limit. It is the task of ALM not to avoid risk, but to manage it, to keep different types of risk within acceptable levels, whilst to sustain profitability. The objective behind all these measures is to make banks fully prepared to face the emerging challenges.

**Salvin Surjith & N. Sathyanarayana (2014) (10)** From the study it is clear that ICICI looks forward to generate a more favorable service in the near future. The balance sheet of the company has been consistent and gives a hint of growth and expansion. The company is expected to increase its profitability by a higher margin through various ways to contribute to the development of the industry and economy. The initiative taken by the bank to serve the various segments of the society is very helpful in developing a better environment for the business.

**Amit Kumar Meena and Joydip Dhar (2014) (11),** research focused on the analysis and comparison of liquidity ratios and asset liability management practiced in top three banks from public, private and foreign sector in India. The analysis was based upon the liquidity ratios calculation and the determination of maturity gap profiles for the banks under study. The results of this study suggested that overall banks in India have very good short term liquidity position and all banks were financing their short term liabilities by their long term assets.
Narayan Baser (2014) (12) study indicates that Asset-Liability Management (ALM) was a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of a bank. The study attempted to evaluate the changing perspectives of the banks in identifying and facing the risks and maintaining Asset Quality so as to ensure profitability with the help of ALM techniques.

Kanhaiya Singh (2013) (13) analyzed the impact of measures and strategies banks undertook to manage the composition of asset-liability and its impact on their performance in general and profitability in particular. There are serious attempts by banks to minimize the asset liability mismatch since the implementation of RBI guidelines in 1997. The study suggested much scope for banks to improve profitability by monitoring and reducing short term liquidity.

Prathap B N (2013) (14) as their research indicated ALM in Indian banking system was concerned, it is still in a nascent stage. Against this backdrop, the objective of the research was to study and analyze the status of ALM approach in the Indian banking system. The study also indicates a strong relationship between fixed assets and net worth for all groups of banks.

Prof. D. S. Patil, (2014) (15), Good corporate governance is critical to efficient functioning of an entity and more so for a banking entity. Thus the need for professional management and healthy governance practices in urban credit cooperative societies/banks in the present competitive environment needs no emphasis. The banks perform the crucial role of transforming illiquid assets into more liquid demand deposits. Putting it more concretely banks perform the function of creating liquidity. The problem that arises is that under certain circumstances this leads to an assets liability mismatch that makes them
susceptible to failure. The present research paper focus on the management of asset and liability in Bank.

**Dr. Anurag b singh & Ms. Priyanka tendon, (2012) (16),** Asset-Liability Management has evolved as a vital activity of all financial institutions and to some extent other industries too. It has become the prime focus in the banking industry, with every bank trying to maximize yield and reduce their risk exposure. The Reserve Bank of India has issued guidelines to banks operating in the Indian environment to regulate their asset-liability positions in order to maintain stability of the financial system. Maturity-gap analysis has a wide range of focus, not only as a situation analysis tool, but also as a planning tool. Banks need to maintain the maturity gap as low as possible in order to avoid any liquidity exposure. This would necessarily mean that the outflows in different maturity buckets need to be funded from the inflows in the same bucket. As per the RBI’s guidelines, banks have to maintain a stable liquidity position in the short term duration.

**Memba, Florence & Makau, Ngati Francis, (2014) (17),** This study is an evaluation on the influence of asset liability on financial performance of commercial banks in Kenya with specific interest in Diamond Trust Bank. The objectives of the study were; to determine the influence of customer deposits; loans advanced to customers; management of the loans advanced to customers and management of loans from other banks influence the Net Interest Income (NII) of Diamond Trust Bank. The study adopted a case study design and made use of Secondary data which was obtained from the bank's annual audited financial statements from 2006-2013. The significance of the regression model was tested using the t-test. Analyzed data was presented in time series plots, tables and graphs. The study concludes that banks should lay more emphasis on
encouraging increased customer deposits and the advancement of more loans to customers so as to increase their financial performance.

**Miss Seema Jaiswal (2010) (18)**, In this paper, she study relationship between two sides of the balance sheet (asset and liability) of scheduled commercial banks (public sector banks, private sector banks and foreign banks) in India for the period 1997-2008, using statistical tool multivariate canonical correlation analysis. There is strong linkage between asset and liability accounts of Indian banks. But over the period of time there is decline in canonical correlation, indicating lower dependency between asset and liability accounts. The decline is more pronounced in case of foreign banks as they are largely exposed to off balance sheet activities. This study also gives important relationship between individual asset and liability account of balance sheet. For funding long term liability, banks are relying on short-term assets, which is a risky strategy of ALM.

**Debasis Bagchi (2003) (19)**, in his paper ‘Assets and liability information analysis of the Indian public sector banks’ studies the behaviour of the banks with respect to their capital adequacy ratio dynamics, by decomposing the financial statements. This study shows the evidences that banks reorganised their assets and liabilities to achieve higher capital adequacy ratios, and also that the assets reorganisation was more pronounced than the reorganisation of the liabilities.

**Ranjan and Nallari (2004) (20)**, studied the relationship between asset and liability using canonical correlation analysis for the period 1992-2004. The study shows that most of the Banks have a good Asset Liability Management (ALM) framework in place. There is a strong relationship between the Fixed
Assets and Net Worth for all the Banks. The Banks (based on ownership) however differ on some of the other aspects like their risk appetite.

Nag and Das (2002) (21), mainly to investigate impact of imposition of capital requirement in the flow of bank credit, it was concluded that banks did shift their portfolio in a way that reduces their capital requirements. Using switching regression model and certain proxy measures, e.g., synthetic Index of Industrial Production, growth of non-SLR investments, they found a clear possibility of regulatory pressure acting as a controlling factor in the supply of credit to the commercial sector.

Nachane, Narain, Ghosh and Sahoo (2000) (22), using regression model and conditioning variables, designed to proxy bank’s internal capital target, documented evidences that capital requirements significantly affect bank’s capital ratio decisions. However, to meet capital requirements approaching regulatory minimum, the banks did not significantly substitute high risk-weighted assets. They added, that profit played a dominant role in the adjustment of capital ratios and banks with higher levels of core capital could have been ploughing back their profits into reserves to raise overall capital levels.

Adiandri Adyafitri & Indra Pratama (23), The study aims to measure the correlation between interest rate risk and profitability, and determine whether Indonesian Banking Industry is an asset sensitive or liabilities sensitive industry with gap analysis and profitability measures such as return on asset and return on equity as methods used. The result describes that there is no correlation between interest rate risk and profitability in PT Bank Central Asia Tbk. PT. Bank Central Asia Tbk is proven to be a liability-sensitive bank for the years of 2007 – 2012. In contrast, the industry is proven to have positive gap ratio which makes it an asset sensitive industry.
**Kanjana E.N (2007) (24),** “Efficiency, Profitability and Growth of Scheduled Commercial Banks in India” tested (1) whether the establishment expense was a major expense, and (2) out of total expense which is met by scheduled commercial banks is more due to more number of employees. In her empirical study, the earning factor and expense factor which are controllable and non-controllable by the bank.

**Ashok Kumar M (2009) (25),** in his study examines how the financial performance of SBI group, Nationalized banks group, private banks group and foreign banks group has been affected by the financial deregulation of the economy. The main objective of the empirical study is to assess the financial performance of Scheduled Commercial Banks through CRAMEL Analysis.

**Garima Chaudhary, (2012) (26),** Recently the Indian economy has witnessed the emergence of many banks in the private sector. There are several reasons behind the increasing number of commercialization of banks. The growth of such banks is not possible unless they witness some success in the context of customer satisfaction or may it be the net assets held by these banks, efficiency of their management or the networks of each bank both in private as well as the public sector bank.

**Dr. B. Charumathi (2008) (27),** Assets and Liabilities Management (ALM) is a dynamic process of planning, organizing, coordinating and controlling the assets and liabilities – their mixes, volumes, maturities, yields and costs in order to achieve a specified Net Interest Income (NII). The NII is the difference between interest income and interest expenses and the basic source of banks profitability. The easing of controls on interest rates has led to higher interest
rate volatility in India. Hence, there is a need to measure and monitor the interest rate exposure of Indian banks. This paper is aimed at measuring the Interest Rate Risk in ICICI Bank by using Gap Analysis Technique. Using publicly available information, this paper attempts to assess the interest rate risk carried by the ICICI bank in March 2005, 2006, & 2007. The findings revealed that the bank is exposed to interest rate risk.

Amit Kumar Dwivedi and D. Kumara Charyulu, (2011) (28) prepared paper on “Efficiency of Indian Banking Industry in the Post-Reform Era, There is strong linkage between asset and liability accounts of Indian banks. The study concludes that banks should lay more emphasis on encouraging increased customer deposits and the advancement of more loans to customers so as to increase their financial performance.

Prapti Gindodiya (2006) (29), ALM is an challenge to rivalry the assets and liabilities in terms of their maturities and interest rates sensitivities so that the risk arising from such disparity i.e. Mainly interest rate risk and liquidity risk-can be enclosed within the preferred bound. It is the task of ALM not to keep away from risk, but to manage it, to keep different types of risk within acceptable levels, whilst to sustain profitability.

Arora P, Garg A, Ranjan B(2007) (30), In their study it was revealed that the least profitable very large banks have the largest proportion of foreign loans, but they focus on asset/liability matching strategies. There are primarily consideration in banks performance which is interest rate risk and liquidity risk
3.2.1 Justification and identification of research Problems

The introduction of prudential accounting norms made the balance sheet of banks unimpressive classifying a significant portion of advances as non-performing. The gradual deregulation of interest rate also resulted in an interest rate war reducing the spreads and making the banks focus on profitability. A policy shift thus took place with regard to the business strategy for identifying and controlling the various risks and maintaining Capital Adequacy and Asset Quality at any cost. The financial experimentation in this line during the last few years converged into a comprehensive technique of managing the total balance sheet dynamics of the bank called Asset Liability Management (ALM), which is at various levels of implementation in Indian Banking. The recovery problem made the balance sheet of the banks unimpressive since last decade.

The present study attempts to evaluate the changing perspectives of the banks in identifying and facing the risks and maintaining Assets Quality so as to ensure profitability with the help of ALM techniques. It also tries to assess the effectiveness of Asset Liability Management as a strategy vital to the progress and development of the Indian Banking Sector in particular and the economy in general making such a study contextually relevant and prospectively significant. The major problems faced by the banks like recovery of lending, etc needs to be solved. Thus the study is titled as “A STUDY ON CHANGING PERSPECTIVES IN ASSET LIABILITY MANAGEMENT IN MODERN BANKING (WITH REFERENCE TO PUBLIC SECTOR BANKS AND PRIVATE SECTOR BANKS)”

3.3 Research Design:

Research has framed explorative research designs which are as follow:
3.3.1 Title of the Study

The study is titled as “A STUDY ON CHANGING PRESPECTIVES IN ASSET LIABILITY MANAGEMENT IN MODERN BANKING (WITH REFERENCE TO PUBLIC SECTOR BANKS AND PRIVATE SECTOR BANKS)”

3.3.2 Objectives of the Study

1. To evaluate the operational efficiency of the banks with regard to the management of assets and liabilities in the modern banking.

2. To identify the impact of deregulation of interest rate in the spread and burden of the banks and to evaluate the interest Rate Risk Management of the banks.

3. To examine whether the banks in India are facing liquidity crisis and to evaluate the liquidity risk management and give importance to recovery problems which creates the liquidity risks.

4. To determine the credit risk faced by the banks in order to identify the real reason behind the high level of NPA and to assess the Credit Risk management of the banks.

5. To verify the effectiveness of the present ALM strategies in the light of the above analysis and to propose practical suggestions to evolve a comprehensive ALM strategy addressing future challenges.

3.3.3 Nature and Scope of the Study

The scope of the study is limited to the selected Commercial Banks (i.e. Public Sector Banks and Private Sector Banks) in India. Foreign Banks have been
excluded from the study. As the policies and regulations of Foreign Banks are different from other Commercial Banks they are excluded.

Study mainly focuses on following aspects:

1. The changing strategies in the management of Assets and Liabilities in last five years.

2. The various risks involved in Assets Liability Management and its impact on profitability and the management of the same.

3. The practical difficulties faced by the bank while implementing various norms.

3.3.4 Variables of the Study

1. Sensitivity Assets – Investments and Advances

2. Sensitivity Liabilities – Deposits and Borrowings

3. Difference Component for ratios

3.3.5 Formulation of Hypothesis

T-Test: Test for significance difference between assets and liabilities of selected banks
This t-test determines significance difference between average valued of sensitive assets and sensitive liabilities of selected banks. The hypothesis being tested which are as follow:

Null $H_0$: $\mu_1 = \mu_1$

Alt $H_1$: $\mu_1 \neq \mu_1$

OR

Null $H_0$: There is no significance difference between assets and liabilities of selected banks

Alt $H_1$: There is significance difference between assets and liabilities of selected banks

T-Test: Test for significance difference between net interest income of private banks and public banks.

This t-test determines significance difference between average valued of net interest income of selected public banks and private banks. The hypothesis being tested which are as follow:

Null $H_0$: $\mu_1 = \mu_1$

Alt $H_1$: $\mu_1 \neq \mu_1$

OR

Null $H_0$: There is no significance difference between net income of public banks and private banks.

Alt $H_1$: There is significance difference between net income of public banks and private banks.

3.3.6 Selection of the Sampling Design

Sample:
As per the information collected there are approximately 26 Public Sector banks (19 Nationalized Banks and 7 SBI and Its Associate Banks) and approximately 30 Private Sector banks (21 Old Private Sector Banks and 9 New Private Sector Banks) in India. The foreign banks, co-operative banks are not considered under it.

**Sample Size**

Present study contained 10 bank units out of them 5 banks selected form the public sector and rest of 5 banks form new private sector banks randomly.

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<tr>
<th>From Public Sector Banks</th>
<th>From New Private Sector Banks</th>
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<tbody>
<tr>
<td>1. State Bank of India</td>
<td>1. ICICI Bank Ltd.</td>
</tr>
<tr>
<td>2. Bank of Baroda</td>
<td>2. HDFC Bank Ltd.</td>
</tr>
<tr>
<td>5. Central Bank of India</td>
<td>5. IDBI Bank Ltd.</td>
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**3.3.7 Period of the study**

In order to analyze the changing perspectives, the study has been conducted for the period of five years i.e. 2005-06 to 2009-10. The prime objective of Asset Liability Management is improving the profitability of the banks, and for the purpose of comparing the profitability performance of last five years.

**3.3.8 Data Collection and Data Sources**

The study based on secondary data, so it has taken from the various available sources. The secondary data collected form the Annual Reports and ALM reports of the selected banks, various publications of RBI such as RBI
Bulletins, Banking Statistics-Basic statistical returns, Statistical Tables relating to Banks of India, etc.

3.3.9 Data Analysis

The data collected and tabulated in appropriate manner. The tabular analysis followed by the graphical presentation shall form the part of research finding besides statistical tabulation details noted separately in sequence.

3.3.10 Statistical Tools and Techniques

**t-Test** for test for significance difference between two samples at 5% significance level for study which as follow:

1. **t-Test**: Test for significance difference between assets and liabilities of selected banks
   
   This t-test determines significance difference between average valued of sensitive assets and sensitive liabilities of selected banks.

2. **t-Test**: Test for significance difference between net interest income of private banks and public banks.

   This t-test determines significance difference between average valued of net interest income of selected public banks and private banks. t-paired test for investigates significance difference between net interest of selected private banks and public banks. Results indicate that weather interest income vary at significance level or not. t-test used with using at 5% significant level 4 (n-1 = 5-1) degree of freedom.
3.4 Outline of Chapter Plan

This study divided into five chapters which are as follow:

Chapter 1: An overview of Indian banking sectors

Chapter 2: A Conceptual frame work of assets-liabilities management

Chapter 3: Research Methodology

Chapter 4: GAP analysis – assets and liabilities management for selected public banks and private banks

Chapter 5: Liquidity analysis and profitability analysis for selected public banks and private banks

Chapter 6: Comparative analysis for selected public banks and private banks with respect to assets and liabilities management

Chapter 7: Summaries, Findings, Conclusions

3.5 Significance of the Study

The competition which has increased in the banking sector compelled the banks to change the strategies and policies for development and growth. The banking sector now –a- days has transformed to profit oriented activities. The problems faced by the banks especially regarding the settlement of the lending given by the bank, recoveries, decreasing interest rate and risk involved is thus increasing the non-performing assets of the banks. Thus the study evaluated the changing perspectives of the banks in identifying and facing such risks.
3.6 Limitations of the Study

The main limitations of the study are as under.

1. This study is based on secondary data derived from published annual reports of the selected units. The reliability and finding are dependent upon the data published in annual report.

2. The study in limited to five years only.

3. The study is related to the Indian banking sectors.

4. The present study is based on Assets -Liquidity Management has its own limitation which also applied to this study.

5. This study is restricted to only selected banks, Hence it becomes the limitation of the study.

6. There are many statistical tool employed for study which have own limitation too.

3.7 Conclusion

Modern Banking plays a vital role in the modern economy. Banking sector occupies an important place in development of economy in India, and is related to close and critical study of various measures observed in the operation of the business and management organization.

This study endeavors to appraise the changing perspectives of the banks in identifying and facing the risks and maintaining Assets Quality so as to ensure
profitability with the help of ALM techniques. It also tires to assess the effectiveness of Asset Liability Management as a strategy vital to the progress and development of the Indian Banking Sector in particular and the economy in general making such a study contextually relevant and prospectively significant. The major problems faced by the banks like recovery of lending, etc needs to be solved.

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2. Basel committee on banking supervision (2001), Principles for the management and supervision of interest rate risk, BIS
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References for methodology:


4. http/www.google.com

Chapter 4:
GAP analysis – assets and liabilities management for selected public banks and private banks

4.1 Introduction

4.2 GAP analysis – assets and liabilities management for State Bank of India

4.3 GAP analysis – assets and liabilities management for Bank of Baroda

4.4 GAP analysis – assets and liabilities management for Union Bank