

AN ANALYSIS OF HOW BANKS IN INDIA MANAGE THEIR ASSETS AND DEBTS: A CLOSER LOOK AT SCBS

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ABSTRACT: Commercial banks in India continue to enter asset and loan book values. When their balance sheets revealed that their assets and bills were not equal, they were in big difficulty. Because the economy was deregulated and things worked in a variety of ways around the world, banks faced numerous dangers. Interest rates, liquidity, exchange rates, and operational issues can all make it difficult to make money and perform well in the market. The country's central bank instructed banks to reduce the disparity between the sorts of assets and loans they hold. Banks have launched numerous successful programs in the last ten years. The purpose of this article is to examine the many techniques and methods used by banks to control the asset-liability ratio and how these approaches and methods affected how well they performed overall and, more crucially, how much money they could make.

Keywords: Asset-Liability Management, Interest Rate Risk, Gap Analysis,

1. INTRODUCTION

Because of the rules that govern how banks and other financial institutions operate and are governed in developing nations such as India, it is more difficult for new enterprises to enter the financial industry. The Reserve Bank of India (RBI), the country's central bank, determines interest rates in India. Because the income was only recorded once a year, keeping track of the balance sheet was simple. There was little danger for the banks that was not reflected on their balance sheets. These significant developments in the banking industry did not occur until after 1991, when open banking was introduced:

- There are less interest rate rules now.
- Cash is not recorded using the accounting approach.
- Forward contracts are being utilized more frequently in overseas commerce, increasing risk that is not shown on the balance sheet.
- A wide range of banking products are available.
- Increasing the competitiveness of the financial game.

Before they were deregulated, several banks didn't compete much. This was due to the fact that public sector banks handled the majority of business. As a result, the bank's deposit problems were mitigated. Asset control was once the primary concern of banks. Risk management has also been increasingly crucial since deregulation.

Definition of ALM

Banks now place a high value on fund management in order to mitigate the risk associated with controlling interest rates and obligations. ALM is defined as "managing both assets and liabilities simultaneously for the purpose of minimizing the negative impact of interest rate movement, providing liquidity, and enhancing the market value of equity," as well as "a planning procedure that accounts for all assets and liabilities of a bank by rate, amount, and maturity." It is comprised of the following elements:

- More attention is being paid to the amount, composition, cost, and return of both assets and obligations.
- Working jointly on roles and resources is an excellent strategy to get the most out of the spread.
- Prices and revenues have an impact on both sides of the balance sheet. The goal in this scenario is to produce as much money as feasible while reducing expenditures as much as possible.

The Process of ALM

The ALM technique is founded on three key concepts:

ALM information system: One aspect of this is being able to obtain enough accurate information.

ALM organization: Create an organizational structure and groups to handle various levels of asset liability management.

ALM process: Some of the topics discussed include managing trade risks, markets, liquidity, interest rates, and cash planning.

Objectives of ALM

The major goals of the ALM Policy are to plan for profits, regulate cash, and handle with interest risks, FOREX risks, stock risks, and commodities price risks.

ALM implementation process

- Managing assets and liabilities (ALM) is the process of mitigating the risks associated with market fluctuations, interest rates, trade, cash flow, and other factors. To help fulfill this goal, an Assets Liability Committee (ALCO) comprised of top executives from each bank has been formed. They will attend the following functions:
- It is critical to select the greatest pricing for goods and investments, as well as the best interest rates for both. This will allow you to maximize your Net Interest Margin (NIM) and Net Interest Income (NII).
- Consider the hazards associated with trading, stock prices, cash flow, interest rates, and money.
- You can pick between fixed and variable rate funds, retail or wholesale deposits, money market or capital market loans, and loans in your home currency or another currency.
- Determine when your obligations and assets will be paid off.
- Derivative instruments can be utilized for risk management as long as they are employed in accordance with the regulations and guidelines in place.

2. OBJECTIVES OF THE STUDY

As this document was being written, the following objectives were in mind:

- To determine the value of India's public sector private banks' assets and liabilities
- To find out how dangerous it is for India's private sector commercial banks to maintain assets and invoices
- To determine the safety of India's foreign business banks' assets and invoices
- To generate good suggestions based on the research.

3. DATA AND METHODOLOGY

The secondary sources used in the research. They came from a research released by the RBI on how Indian banking has grown and where it is headed. This project made use of items from 2001 to 2015. It has banks in the private, public, and international sectors.

4. LITERATURE REVIEW

The Basel Committee on Banking Supervision proposed a comprehensive structure for banking supervision and the rules that should be utilized to keep an eye on the system in 2001. A great deal of study and writing has been done on how banks manage their assets and obligations.

This was done so that everyone in the banking industry may follow the same regulations and standards. This committee also stated that risk and capital management should be managed by stringent standards to ensure that enough capital is available to cover all potential hazards that may develop during the lending and borrowing process. Banks must keep more cash on hand in order to take on more risk. This will keep the peace and keep people's money safe.

According to the Basel II guidelines, which were published in 2004, banks all over the world must retain a particular amount of capital on hand in order to protect themselves from the numerous hazards they confront

in the banking industry. According to Basel II, strong regulations for risk and cash management should be implemented. These guidelines would ensure that a bank maintains enough cash reserves in relation to the risk of its investments and best practices. When the level of risk rises, so does the quantity of cash a bank must have on hand to be secure.

Gardner and Mills (1991) discussed how banks utilize asset-liability management as part of long-term planning and to deal with new tax agreements, e-commerce, and changes in government supervision.

Due to the "crisis in lending to LDCs," Haslem et al. (1999) employed standard analysis and the asset/liability management interpretative framework to discover and explain how large US banks handled their international and domestic balance sheets. According to their findings, the largest banks that don't make much money have the highest foreign loans. However, asset/liability matching strategies are crucial to them.

Charumathi began researching strategies to manage interest rate risk in 2008. He discovered that interest rate and cash concerns are balance sheet risks.

Vaidhi and Shahi (2001) investigate how Indian banks manage their bills and assets. They advised banks to include interest rate risk and cash risk into their business processes.

Rajan and Nallari examined asset-liability management in Indian institutions from 1992 to 2004 using canonical analysis. From 1992 to 2004, SBI and its competitors performed the best in terms of asset and debt management, according to this analysis. They discovered that, with the exception of foreign banks, all institutions could be classified as liability-managed. Private sector banks were more concerned with making money, whereas nationalized institutions were too concerned with cash flow.

Milir Venkatesh and Bhargav's 2008 study was largely about matching pricing to maintain the gap the same. Banks are achieving success as they concentrate on combined balance-sheet management, which examines all of the factors that influence the optimal balance-sheet make-up. As a result, several aspects of a bank's balance sheet are examined while its strengths are considered. Keeping separate savings, loans, and advances is no longer very useful. The new way of doing things for the ALM system differs from the old way in that it focuses on providing value, performs thorough risk analysis, and looks at the balance sheet dynamically.

Dash and Pathak (2011) proposed a linear model for analyzing assets and debts. They discovered that public sector banks are the best at managing their assets and loans, making money, receiving the funds they require, and mitigating interest rate risk. This study investigates how RBI guidelines influence how well banks handle ALM.

GAP ANALYSIS

Liabilities	Assets
Rate Sensitive Liabilities	Rate Sensitive Assets
Fixed Rate Liabilities	Fixed Rate Assets
Total	Total

Funds Gap

- When you subtract Risk Sensitive Liabilities (RSL) from Risk Sensitive Assets (RSA), you obtain the money gap.
- If there is a difference, it suggests that assets that are sensitive to interest rate movements are paying off fixed-rate debt.
- If the gap is negative, it indicates that purchasers who are concerned about interest rates are purchasing fixed-rate assets.

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

The majority of the time, an asset is appraised when a loan is about to expire or is being extended. The bank

will only renew these loans if the predicted yield is comparable to the higher yields currently expected on other financial instruments of comparable quality. This is true even if interest rates have risen after the loans were first made available.

Interest Sensitive Gap:

Interest Sensitive Gap = Interest Sensitive Assets - Interest Sensitive Liabilities demonstrates that there is a difference between these assets and debts that shifts as interest rates fluctuate.

5. COMPARISON OF SENSITIVE ASSETS AND SENSITIVE LIABILITIES OF PSCBS IN INDIA – T TEST

T-Test: to understand the distinction between sensitive assets and liabilities in India's PSCBs and what it signifies. This T-test determines whether the difference between the average amounts of PSCBs' sensitive assets and liabilities is significant. The T-test is used to determine whether the following statements are true:

Null H0: The sensitive liabilities and sensitive assets of Indian PSCBs are not dissimilar.

Alt H1: PSCBs in India were in charge of and possessed a large number of classified assets.

Table 1

Comparison of Sensitive Assets and Liabilities of PSCBs in India – T test

Particulars	Sensitive Assets	Sensitive Liabilities
Mean	726807.02	2766586.52
Standard Deviation	1793667.61	1838609.60
Degrees of Freedom	28	
T-Value	0.0558	
P(T<=t) Two Tail	0.9559	
T critical two tail	2.06	

Source: Computed data

Table 1 shows the result of the t-test. The score reflects the bank's ability to manage large invoices and assets. We perform a t-test with 28 degrees of freedom ($n1 + n2 - 2 = 15 + 15 - 2$) and a 0.05 significance level. The level of significance is set at 5%.

The t-test examines the 13-year period from 2000-2001 to 2014-2015 to determine how significant the mean difference between sensitive assets and liabilities is. The null hypothesis is valid as long as the significance level is 0.05. This means that there is no clear distinction between the sensitive assets and liabilities of Indian PSCBs.

The two-tailed t-test value of 0.9559 is significant at the 5% level, and the P-values are greater than the significance level of $= 0.05$. The T-test concept can be applied in the range of -2.06 to +2.06. This time, the t-test result was 0.0558, which falls between -2.06 and +2.06.

As a result, the null hypothesis is correct. According to the report, there was no discernible change in the mean of sensitive assets and liabilities of PSCBs in India from 2000-2001 to 2014-2015. A test revealed that PSCBs India manages its assets and invoices well.

6. COMPARISON OF SENSITIVE ASSETS AND SENSITIVE LIABILITIES OF PvtSCBs IN INDIA – T TEST

T-Test: to understand the critical distinction between PvtSCBs and India's sensitive assets and debts. This t-test determines the significance of the difference between the average value of India's sensitive assets and liabilities and the average value of PvtSCBs. The T-test can be used to put the following ideas to the test.

Null H0: In India, there isn't much of a distinction between PvtSCBs' sensitive assets and liabilities.

Alt H1: The most important assets and debts of PvtSCBs in India fluctuate significantly.

Table 2

Comparison of Sensitive Assets and Liabilities of PvtSCBs in India – T test

Particulars	Sensitive Assets	Sensitive Liabilities
Mean	656894.46	670104.45
Standard Deviation	53839.61	525317.20.
Degrees of Freedom	28	
T-Value	0.0633	
P(T<=t) Two Tail	0.9500	
T critical two tail	2.06	

Source: Computed data

Table 2 displays the T-test findings. The outcome demonstrates how well the bank handles its large bills and assets. The t-test has a 5% level of significance of 0.05. There are 24 possibilities possible ($n_1 + n_2 - 2 = 15 + 15 - 2$).

The t-test is used to determine the significance of the mean difference between sensitive assets and liabilities from 2000-2001 to 2014-2015. This example employs the null hypothesis, which states that at the 0.05 level of significance, there is no significant difference between the sensitive assets and sensitive liabilities of PvtSCBs in India.

The two-tailed t-test value of 0.95 is significant at the 5% level, and the P-values are greater than the $= 0.05$ level of significance. The T-test concept can be applied in the range of -2.06 to +2.06. For this T-test, a value of 0.0633 was acceptable as long as it was between -2.06 and +2.06.

The data demonstrate that the average of PvtSCBs' sensitive assets and debts in India did not vary much between 2000-01 and 2014-2015. This implies that we should accept the null theory. To summarize, India's private sector banks have an excellent system for tracking loans and assets.

7. COMPARISON OF SENSITIVE ASSETS AND SENSITIVE LIABILITIES OF FCBS IN INDIA – T TEST

T-Test: to understand the distinction between sensitive assets and liabilities of Indian banks and the implications of each. The average difference in value between India's largest assets and debts and FCBS is determined using a t-test. The T-test can be used to put the following ideas to the test.

Null H0: There isn't a substantial distinction between sensitive assets and sensitive liabilities among Indian banks.

Alt H1: It had a variety of FCBS with various types of sensitive assets and liabilities.

Table 3

Comparison of Sensitive Assets and Liabilities of FCBS in India – T test

Particulars	Sensitive Assets	Sensitive Liabilities
Mean	211534.40	211289.10
Standard Deviation	159914.75	133979.17
Degrees of Freedom	28	
T-Value	0.0042	
P(T<=t) Two Tail	0.9967	
T critical two tail	2.06	

Source: Computed data

This is what the T-test in Table 3 revealed. It demonstrates whether FCB institutions are taking proper care of their vital bills and assets. The T-test allows us to do 24 things, which is $15 + 2$ and 24. The level of significance is set at 0.05, or 5%.

The t-test is used to determine the significance of the mean difference between valuable assets and debts

during a 15-year period from 2000-01 to 2014-2015. A significance level of 0.05 in this circumstance indicates that there isn't a significant difference between FCB India's assets and loans.

The two-tailed t-test value of 0.9967 indicates 5% significance, and the P-values are more than the significance level of $= 0.05$. The T-test concept can be applied in the range of -2.06 to +2.06. The t-test result of 0.0042 fell within the allowed range of -2.06 to +2.06.

The null hypothesis should be accepted based on the data. According to the report, there is no discernible difference in the mean of FCBs India's sensitive assets and liabilities from 2000-01 to 2014-2015. As a result, the test results suggest that FCBs India's system for tracking assets and debts is adequate.

8. SUGGESTIONS

- Since the implementation of RBI rules in 1997, banks have worked hard to ensure that their assets and liabilities are more closely matched. Banks have implemented effective tracking and follow-up systems at multiple levels.
- Each institution has also specified a limit number of mismatches that can occur inside each time bucket for close monitoring.
- According to the report, banks can make more money by monitoring and reducing short-term liquidity.
- The excessive splitting of data into small time boxes demonstrates a deficiency.
- To compensate for the short-term scarcity of cash, banks borrow from the market at higher interest rates, reducing their earnings.
- When banks employ a variety of strategies, they are better able to manage interest rate risk.

REFERENCES

1. Trends and progress of banks in India, Reserve Bank of India, 2005-06, 2010-11 Basel II (2004) International convergence of capital measurement and capital standards: a revised framework, BIS
2. Dash, Venkatesh, Bhargava (2008), An analysis of asset-liability management, <http://ssrn.com/abstract=1760786>
3. Charumathi (2008), Asset Liability management in Indian banking industry, World congress on engineering, 2008 Vol. II
4. Basel committee on banking supervision (2001), Principles for the management and supervision of interest rate risk, BIS
5. Dash.M and Pathak, R. (2011). A linear programming model for assessing asset liability management in banks, - ICFAI Journal of risk management
6. Black, R and Brown, K. (2002), Asset liability management: what does the future have in store? Balancesheet, Boston.