ISSN: 2454-9940

INTERNATIONAL JOURNAL OF APPLIED SCIENCE ENGINEERING AND MANAGEMENT

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www.ijasem.org

INTERNATIONAL JOURNAL OF APPLIED SCIENCE ENGINEERING AND MANAGEMENT

ISSN2454-9940
www.ijsem.org
Vol 12, Issuse.3 Sep 2018

ASSET LIABILITY MANAGEMENT AT HDFC BANK: A COMPREHENSIVE OVERVIEW

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ABSTRACT: Asset-liability management, or ALM, is a risk-control method used by commercial banks all over the world. Banks must cope with a variety of economic hazards, including interest rate risk and cash risk. All commercial banks get their money back based on these risk criteria. Using HDFC Bank as an example, this study investigates liquidity mismatches across time periods and their impact on returns in India. The study examines financial data from the 2007-2008 fiscal year to the 2016-17 fiscal year across a ten-year period. The descriptive style is used in the research article. Other sources of information were reports and RBI directions. According to the findings, ALM is an effective risk management strategy.

Keywords: Liquidity Risk, Interest rate risk, NII.

1. INTRODUCTION

Banks have consistently played and will continue to play a crucial role in the payment system, rendering them an indispensable component of any organization. The fundamental role of commercial banks is to receive deposits from individuals and entities, and subsequently utilize these funds to meet the financial needs of their customers. Financial institutions are required to uphold a robust liquidity position as an integral aspect of their role as intermediates in the financial sector, facilitating the efficient movement of funds. This phenomenon can be attributed to the role played by the deposits and loans offered by banks, as they contribute to the overall liquidity of the economy. This observation suggests that the establishment of a robust and efficient banking infrastructure is crucial for ensuring the stability of a financial system.

The implementation of economic reforms in 1991 facilitated numerous advancements that rendered the Indian banking sector more dynamic and competitive. Several significant changes have taken place in the financial sector, such as a reduction in the level of control exercised over interest rates and reserve requirements, namely the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). Additionally, there has been a consolidation of different segments within the financial market, and banks now have the ability to raise capital from the capital market in order to fulfill their capital adequacy needs.

There are several notable factors that have contributed to changes in corporate operations. These include an increased level of autonomy in managing enterprises, a heightened focus on technological integration, the ongoing shift towards capital account convertibility, and various other factors. Due to notable shifts in the economy, Indian banks are diversifying their operations by venturing into additional sectors, such as value-added services, and generating revenue through means beyond their core function of borrowing funds from savings (Dwivedi,

ISSN2454-9940
www.ijsem.org
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2015).When novel financial institutions, financial tools, investment prospects, and challenges arise. Moreover, with the increasing competitiveness of the Indian economy, banks have devised novel strategies to generate revenue. However, this has resulted in a reduction in profit margins and an overall escalation in risks (Anurag et al., 2012).Every commercial enterprise has a certain degree of uncertainty and potential hazards. A commonly accepted conceptualization of risk entails any factor or circumstance that poses challenges or impediments to the successful attainment of a predetermined objective. Risk is a ubiquitous factor within the business sector (Kanchu, 2013). In the event of non-repayment of a loan, a bank may encounter difficulties in sustaining its operations as it heavily depends on the availability of third-party funds that are subject to immediate repayment. Complete eradication of dangers is an unattainable objective; nonetheless, a multitude of solutions exist to effectively mitigate and control them.

Asset liability management (ALM) is a comprehensive and flexible approach used to assess, monitor, and control the financial risks linked to fluctuations in interest rates, foreign exchange rates, and other variables that could potentially affect a firm's cash flow (Goyal, 2016).Asset Liability Management (ALM) is a crucial practice aimed at effectively managing the balance sheets of commercial banks. The primary objective is to optimize net interest income while simultaneously mitigating risks associated with the bank's portfolio.

Consequently, the ALM functions encompass the utilization of various instruments to effectively mitigate credit risk, interest rate risk, and liquidity risk. In alternative terms, it can be stated that Asset Liability Management (ALM) is the pinnacle of financial risk management for all banking institutions.

In recent years, there has been a notable evolution in the field of asset liability management, wherein the approach has shifted towards a simultaneous consideration of both assets and obligations. In addition to interest rate risk, the current framework incorporates considerations of liquidity risk, solvency risk, business strategy, and asset distribution. The management of asset risk within the financial industry has undergone significant evolution throughout time, encompassing a wider range of responsibilities. This field is subject to constant evolution.

Banks encounter several risks, including credit risk, interest rate risk, foreign currency risk, price risk pertaining to equities or commodities, liquidity risk, and operational risk (Shetty et al., 2016). Consequently, financial institutions are compelled to implement efficient risk management strategies. There are multiple perspectives from which balance sheet mismatches might be analyzed. The objective of this study is to assess the risk-return policies, stability, liquidity, and risks of private sector banks in India. The methodology employed for this investigation involves the use of GAP analysis, which will be applied to the specific situation of HDFC Bank.

2. LITERATURE REVIEW

The Basel Committee on Banking Supervision establishes the fundamental guidelines for determining how sensitive interest rate risk is.Vaidyanathan (1999) investigated the many categories of risk that needed to be managed in India as part of his research. The research looked at asset liability management solutions from both an asset and a liability standpoint. It concluded that banks must employ a modular approach to fulfill the asset liability management needs of various product lines and divisions, making the strategy more difficult to implement.

According to Chabraborty and Mohapatra (2008)8, public sector banks have a favorable asset-liability maturity trend. However, the biggest risks that affect the bank's capacity to produce money are interest rate and liquidity threats. To keep the bank's finances steady, these risks must be examined and managed on a regular basis.

ISSN2454-9940
www.ijsem.org
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According to Sheela P. and Tejaswini Bastray's (2015)9 paper, gap analysis is utilized to assess interest rate risk. Banks typically charge high interest rates on loans to compensate for the short-term lack of cash, which reduces their profitability. According to Amith Kumar Meena and Joydip Dhar (2014) 10, the main difficulty that banks are now facing is cash management. This study looked at banks' liquidity and maturity gaps in order to eliminate risk in the banking industry. GV. Bhavani Prasad and D. Veena (2013)11 demonstrated the importance of ALM in preventing risks associated with problematic loans, portfolio management, and loan review processes.

According to Kajal Chaudhary and Monika Sharma (2011)12, public banks should prioritize their work. Banks should exercise extreme caution when deciding who to lend money to in order to reduce their bad debts. Dr. N Kavitha was born between the years 2012 and 2013. Her analysis reveals how the bank's finances effect the optimal mix of assets and liabilities for making the bank profitable by looking at factors like debt-to-equity and capital adequacy ratios, among other things. To reduce predictable risk, more attention should be paid to ALM characteristics such as the appropriate asset-liability mix, maturity, rate sensitivity, and asset and liability liquidation. Dr. B. Charumathi examined ICICI Bank's risk of interest rate fluctuations utilizing gap and duration analysis in her 2008 paper. According to the findings, ICICI Bank is exposed to interest rate risk.

Mihir Dash, K.A. Venkatesh, and Bhargav B.D.'s (2011)15 maturity gap analysis study sought to investigate maturity gaps in Indian public, private, and foreign banks. The maturity gap method was employed in the study to examine asset liability management. It discovered that private sector banks had good short-term liquidity, whereas public sector banks were better at managing liquidity risk.

The first step in long-term strategy planning is regarded to be asset liability management. The purpose of this research is to examine the asset liability management techniques of HDFC Bank (a private Indian bank).

Objectives of the study

- Examine how HDFC Bank manages its assets and liabilities.
- Examine HDFC Bank's age gap in comparison to other banks. Determine the cash risk.

3. RESEARCH METHODOLOGY

This is a descriptive study. This study relies on secondary data. The study focuses on how the private Indian bank HDFC Bank manages its assets and debts. For this study, the RBI website, balance statements, yearly reports, and other relevant financial sources were used. Books, periodicals, and web articles can also be useful. The financial position of the given bank can be determined using GAP Analysis.

Gap Analysis

Banks confront a variety of significant hazards as they conduct their operations. Operating risk, foreign currency risk, interest rate risk, liquidity risk, credit risk, and stock and commodity price risk are all examples. This study discusses two major dangers and how to manage them:

Interest Rate Risk

Interest rate risk is the threat associated with interest rate changes. It also considers how changes in income can influence these changes.

Liquidity Risk

According to the Basel Committee on Banking Supervision, a bank's liquidity is defined as its capacity to pay bills on time and acquire new assets without incurring excessive losses. Banks are exposed to liquidity risk because they play an important role in maturing short-term funds into long-term loans. This has the potential to impact both individual institutions and markets as a whole. Liquidity risk arises from age differences, which occur when liabilities have a shorter term than assets.

Banks use asset-liability matching (ALM) to try to match assets and liabilities based on age and how sensitive they are to changes in interest rates in

ISSN2454-9940
www.ijsem.org
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order to reduce interest rate risk and liquidity risk. Gap analysis is one method for dealing with assets and liabilities. It is used to calculate the risk associated with interest rates and cash. GAP analysis categorizes Rate Sensitive Liabilities (RSL) and Rate Sensitive Assets (RSA) into time buckets depending on their remaining age or the next re-pricing phase at a given moment. This aids in determining how much of a difference there is between them. When a cash flow is examined within the time period under consideration, an asset or debt is said to be rate sensitive.

The contract's interest rate changes or restarts over time.

The controlled interest rates are subject to vary, and early departures are permitted.

GAP = RSA-RSL in this situation.

When things don't line up, it can be for the better or for the worst. GAP ratio = RSAs/RSL RSA.>RSL is a positive distinction, whereas RSA.>RSL is a negative distinction.

If there is a positive mismatch, the extra income can be utilized to buy new assets and make money market trades, among other things.

Market borrowings (call/term), bill rediscounting, repurchase agreements, and using foreign money converted into rupees are all options to compensate for a negative mismatch.

The table below shows how interest rate changes influence Net Interest Income (NII) when there is a positive or negative gap.

Table :1 A table illustrating how Net Interest Income changes when there is a positive or negative difference.

GAP	INTEREST RATE CHANGE	IMPACT ON NII
Positive	Increases	Positive
Positive	Decreases	Negative
Negative	Increases	Negative
Negative	Decreases	Positive

4. DISCUSSION

According to Table 2, the HDFC Bank had a negative GAP in the short, middle, and long term time periods in 2007-2008. The time periods covered ranged from one to three years. The bank has a positive GAP between its rate-sensitive assets and liabilities in both the very short and long periods, from six months to a year. This allows the bank to invest any excess funds in assets that will generate further revenue. Furthermore, it is obvious that the bank's long-term assets outweigh its loans.

From 2008 to 2009, the bank suffered in both the short and long run. This implies that loans and both short and long-term investments are declining. Furthermore, because the bank needs to borrow money to meet its short- and long-term capital needs, it will have to pay more in interest. The global recession of 2007-2008 may also be viewed as a contributing factor to the negative GAP. Furthermore, the bank only has a favorable gap in the very short and medium term. During these difficult times, the bank may only invest through alternative means.

In the next two years, 2009-10 and 2010-11, the analysis discovered a negative GAP in both long-term and extremely short-term time buckets. Maintaining a negative short-term GAP is riskier than maintaining a negative long-term GAP since it impairs the bank's capacity to meet short-term financial demands.

Furthermore, short-term liquidity issues indicate that HDFC banks' loan and advance strategies should be more active. The following year, however, it was discovered that the bank had maintained its positive GAPs in the short- and medium-term maturity bins since the beginning of the 2011-12 fiscal year. The rise in short- and medium-term loans, advances, and investments can be attributed to the bank's better policy recommendations. According to the majority of the years and time buckets examined, HDFC Bank has a sound ALM strategy, keeps cash on hand, and seeks to earn the best return possible during interest rate swings while also taking into account how RSA and RSL effect NII.

5. CONCLUSION

Asset and Liability Management (ALM) is an essential instrument utilized in the oversight,

ISSN2454-9940
www.ijsem.org
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evaluation, and control of a financial institution's liquidity and exposure to interest rate fluctuations. India has implemented a policy of easing interest rate regulations, so subjecting the banking system to potential market volatility and interest rate uncertainty. Consequently, the implementation of Asset Liability Management (ALM) is crucial for effectively managing this particular risk. ALM enables management to evaluate the potential dangers and strategically minimize them by making appropriate decisions at the opportune times.

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