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## A STUDY ON ASSET LIABILITY MANAGEMENT OF CANARA BANK

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#### Abstract

ALM is a strategic financial management technique that comprises managing a company's assets and commitments in order to minimize risk and maximize performance. ALM is critical in financial organizations such as banks, insurance companies, and investment firms because it allows them to manage their exposure to various risks such as interest rate risk, credit risk, liquidity risk, and market risk more efficiently. This abstract provides an overview of the core concepts and goals of ALM. It begins by explaining core asset and liability management principles such as asset and liability identification and measurement, as well as asset and liability characteristics such as duration, cash flow patterns, and market volatility susceptibility. The abstract then digs into the key goals of ALM, which include generating profitability, ensuring solvency and liquidity, and maintaining a strong risk management framework. This abstract also discusses basic ALM approaches and procedures such as duration matching, cash flow matching, and vaccination. It highlights the need of scenario research and stress testing in assessing the financial impact of expected market volatility. The abstract also looks into how regulatory requirements and standards like Basel III affect ALM operations and financial stability.

Keywords: Asset, liabilities, Equities, Income, Expenditure.

#### I. Introduction

The goal of Asset Liability Management (ALM) is to increase net profitability through careful management of the balance sheet. In order to achieve the desired risk-return profile, this approach optimizes the net interest margin. If one must explain asset and liability management without going into depth regarding its needand utility, then it can be summed up as the management of money, which has value, can change shape quickly, and can return to its original shape with or without more growth. Maintaining a healthy balance between assets and liabilities is the goal of Asset and Liability Management (ALM).

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The corporate landscape shifted as a result of the country's efforts to expand its markets. Inplace of the previous market system overseen by the government, a free market system is nowin existence. The cooperative's bottom line has taken a hit as a result, forcing them to explore ntested markets and take on more risk. Management is concerned about the RISK of an asset'svalue decreasing because most of the money they have comes from outside sources. It's becomecrucial to them that these dangers be mitigated. Deposits can be made into a cooperative, although they are typically prohibitively expensive. The terms of the assets created from thesefixed savings did not line up well with the terms of the savings. ASSET AND LIABILITYMANAGEMENT is a method that can aid in finding a more permanent solution to this issue. To manage a company's assets and liabilities is the purpose of Asset Liability Management (ALM). This strategy pairs assets with obligations in accordance with their respective rates of return and due dates. According to this definition, ALM is the process of adjusting liabilities to meet loan demands, liquidity needs, and safety requirements. This will be the most beneficial to them because it will reduce the risks they confront and maintain different types of dangers within manageablebounds

#### Definition

Asset/liability management is the process of managing the use of assets and cash flows to reduce the firm's risk of loss from not paying a liability on time. Wellmanaged assets and

liabilities increase business profits. The asset/liability management process is typically applied to bank loan portfolios and pension plans. It also involves the economic value of equity.

#### II. Review of literature

Karthigeyan D.V(2013) in his research paper asset liability management in Indian Private Sector banks-A Correlation Analysis have studied in various risk associated with bank i.e. credit risk ,operational risk,exchange risk,and regulatory risk.for the purose of the study 3 old and new generation private banks were selected to risk effectiveness of the banks the Canonial correlation technique was applied to capture the predictor variablesin bank.

Dash M, (2013) in his research Impact of Bank Asset and Liability Management on Profitability have examined the impact of ALM on the profitability of banks whilst ensuring protection against different kinds of risk prevailing for which 35 public & private sectors banks were taken as samples. This conclude that banks are evident to short- term risk with negative mismatch in 1-90 days time bucket.

Amit Kumar Meena and Joydip Dhar (2014) 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 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) 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) 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 1997the study suggested match scope for banks to improve profitability by monitoring and reducing short term liquidity.

#### **III.** Need for the study

- Banks can use ALM to better handle interest rate volatility, liquidity, and funding risks, among others. Banks can avoid losses and keep their stability by keeping an eye on and controlling these risks.
- To maximize profits while reducing losses, sound ALM may assist financial institutions fine-tune their asset and liability allocation. It is important to recognize and control the risks and rewards associated with all of your products and services.
- In order to stay in good standing with financial watchdogs, banks must uphold specific standards of capital adequacy, liquidity, and risk management. Banks can avoid fines and other trouble with the law by learning about ALM and applying its principles.
- To foresee and plan for future economic and market conditions that may have an effect on the bank's asset and liability positions, ALM helps financial institutions plan ahead. Banks can sustain their long-term health and stability if they take measures to proactively manage these risks.
- With the knowledge and understanding gained from studying ALM, banks are better equipped to make strategic business decisions. Banks can make smarter choices about product offerings, pricing, and other strategic moves by analyzing the risks and rewards associated with those options.

#### IV. Objectives of the study

 To control and reduce the risks that come with changes in interest rates, liquidity, and funds.

- To make sure that the bank's assets and debts match its overall business plan, financialgoals, and willingness to take risks.
- To find the best mix of assets and liabilities for the bank so that it can make the most moneyand take the least risk.
- To examine cash in hand position of the bank which wood make us understand the fundingneeds of the bank.
- To evaluate the bank's success in terms of how well it makes money, how safe it is, andhow well it works.

#### V. Scope of the study

- Study is based on secondary data sources i.e., financial statements of Canara bank for the study duration.
- $\blacktriangleright$  Duration of the study is 2018-2022.
- Various financial ratios are used to perform data analysis.

#### VI. Research methodology

The study of ALM Management is based on two factors. **Data Sources:** 

#### Data Sources:

#### Secondary data sources:

Data was compiled from the RBI's standards for ALM as well as annual and published reports from CANARA BANK and other reputable financial journals and management texts.

#### Data analysis tools

- Financial ratio
- Valuation ratio
- Performance ratio

#### VII. Limitations of the study:

Due to Constraints of time and resources, the study is likely to suffer from certain limitations. Some of these are mentioned here under so that the findings of the study may be understood in a proper perspective. The limitations of the study are:

• The study is only restricted to Canara bank only.



- Banks are subject to various regulatory and compliance requirements related to ALM, such as stress testing, liquidity risk management, and capital adequacy. Meeting these requirements can be challenging and time-consuming, particularly for smaller banks with limited resources.
- ALM involves managing risks in an uncertain and dynamic environment. Changes in interest rates, market conditions, or economic fundamentals can quickly impact a bank's asset and liability positions, making effective ALM challenging.
- Effective ALM requires accurate and timely data on a bank's assets, liabilities, and risk exposures. However, data quality and availability can be a significant challenge, particularly for smaller or less sophisticated banks.
- ALM can be quite complex, as it involves managing multiple risks across multiple dimensions. As a result, it can be challenging

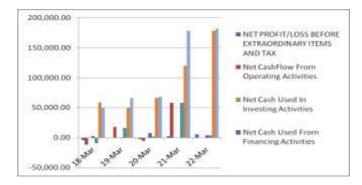
| CASH FLOW OF<br>CANARA BANK (m<br>Rs. Cr.)                  | 22-Mar                  | 21-Mar     | 20-Mar    | 19-Mar    | 18-Mar         |
|---|-------------------------|------------|-----------|-----------|----------------|
| NET PROFIT/LOSS<br>BEFORE<br>EXTRAORDINARY<br>ITEMS AND TAX | 5,678. <mark>4</mark> 1 | 2,557.58   | -1,235.72 | 347.02    | -4,222.24      |
| Net CashFlow From<br>Operating Activities                   | 268.1                   | 58,533.23  | -5,458.74 | 17,886.08 | -<br>11,503.83 |
| Net Cash Used In<br>Investing Activities                    | -657.28                 | -665.84    | -277.05   | -461.12   | -274.16        |
| Net Cash Used From<br>Financing Activities                  | 4,035.45                | 283.89     | 7,854.57  | -1,184.60 | 2,864.86       |
| NET INC/DEC IN<br>CASH AND CASH<br>EQUIVALENTS              | 3,646.27                | 58,151.28  | 2,118.78  | 16,240.36 | -8,913.13      |
| Cash And Cash<br>Equivalents Begin of<br>Year               | 178,408.03              | 120,256.75 | 66,152.69 | 49,912.33 | 58,825.46      |
| Cash And Cash<br>Equivalents End Of<br>Year                 | 182,054.30              | 178,408.03 | 68,271.47 | 66,152.69 | 49,912.33      |

for banks to develop and implement effective ALM frameworks, particularly if they lack the necessary resources or expertise.

## VIII. Data Analysis and

**Interpretation:** A sample of data analysis results are presented in this section.

Tabular representation of Cash flows of Canara bank for 2018-2022



According to the data presented above, Canara Bank's cash flow forecast for 2018–2022. When compared to other accounting years, net profit or loss before unusual items and tax is highest in 2022 and lowest in 2018. If we look at individual years, 2022 shows the highest



net cash consumed from financing activities, while 2019 shows the lowest. When compared to previous fiscal years, 2022 has a significant net increase/decrease in cash and cash equivalents, while 2018 has a low increase/decrease.

## IX. Findings, Suggestions and conclusion

#### Findings

- As can be seen in the table and graph below, the equity share capital rises each year, reaching a peak of 1,814.13 in 2022 and a low of 1,646.74 in 2021. Deposits and borrowings are lower than they were in 2022, while reserves and surpluses are higher. Finally, we've noticed an increase in total capital liabilities beginning around the year 2022.
- Cash and Reserve Bank of India balances are very high compared to last year's levels (as seen in the table and graph that follow), but Money at Call and Short Notice balances are very low. It is also clear that both Advances and Canara Bank's total assets will grow through 2022.
- Interest and discounts on advances and bills are lower in 2022 than they were in 2017 according to a profit and loss statement. Canara Bank's total income is up from 2022 thanks to a 100.35 percent increase in investment income from that year to the present.
- Interest Spent (excluding Payments to and Provisions for Employees) and Operating Expenses (excluding Employee Cost and Depreciation) are shown to be greater in 2022 compared to 2017 in the following graph. Canara Bank's total expenditures in 2022 were 19,791.91, an increase from the previous year's total expenditures of 19,338.18.
- Based on the data presented in the table and graph above, I estimate that Canara Bank will have between and. The pretax net profit or loss for the fiscal year 2022 is the highest and the pretax net loss for the fiscal year 2018 is the lowest. Net cash requirements

for financing activities are highest in fiscal year 2022 and lowest in fiscal year 2019. There is both a substantial and a small net increase/decrease in cash and equivalents in 2022 compared to previous fiscal years.

- Per-share ratios are, as I inferred from the aforementioned data and graph. The basic EPS (Rs.) in 2022 is quite high compared to the previous fiscal years, while the EPS (Rs.) in 2018 is very low. The diluted EPS (Rs.) for the year 2022 is very high, while the diluted EPS (Rs.) for the year 2018 is quite low. The Net Profit/Share (Rs.) in 2022 is quite high compared to other fiscal years, while it is very low in 2018.
- Per-worker ratios are, as I inferred from the data and graph up top. Interest Income per Employee (in Indian Rupees) is highest in 2022 and lowest in 2018. The ratio of net profit to employees (in Indian Rupees) is highest in 2022 and lowest in 2018. The business-to-worker ratio (Rs) is highest in 2022 and lowest in 2018 compared to the prior two fiscal years.
- The data and graph up top helped me observe that branch-level ratios are Interest Income/ Branch (Rs.) is highest for the fiscal year 2022 and lowest for the fiscal year 2018. Net Profit/Branches (Rs) in 2022 is high compared to prior fiscal years and low compared to 2021. Business/Branches (Rs) in 2022 is high compared to past fiscal years, whereas 2018is low.

#### Suggestions

- For precise accounting of liquidity and interest rate risks, the company should beef up its management information system (MIS) and computer processing capacities.
- Upgrading old systems and Application software to achieve better and improved levels is essential to maximizing short-term NIM, which in turn maximizes economic value.



- Aware of and responsive to changes in its working environment is crucial for preventing unintended consequences.
- To successfully integrate the risk management process with efficient business strategies, CANARA BANK needs an efficient human and technology infrastructure

#### Conclusion

ALM does not necessarily aim to eliminate or even significantly reduce risk. The amount of risk will change depending on the entity's goals and the return need. Senior management of a business often sets financial goals and risk tolerance levels. and they periodically assess them. For all assets and obligations, all potential sources of risk have been determined. Risks are dissected into its constituent parts, with the underlying reasons of each part being evaluated. Relationships between various dangers and outside factors are also established. The distribution of results for a given collection of simulated scenarios for the component piece over time can be used to quantify risk exposure in relation to changes in the component pieces, as a maximum expected loss for a certain confidence interval in a given set of scenarios, or as a maximum anticipated loss for a given set of scenarios. It is necessary to measure and monitor the risk exposure on a regular basis. Operating in a dynamic context, the entity's risk tolerances and financial goals may change over time, making the current ALM techniques

obsolete. Consequently, these tactics need to be assessed and changed on a regular basis. In thisstep, having a structured,

written communication method is crucial.

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