A STUDY ON

ASSET AND LIABILITY MANAGEMENT IN NEPALESE FINANCIAL INSTITUTIONS

A THESIS

SUBMITTED BY

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VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis presented by

Hasan Shah

Entitled

“Asset and Liability Management in Nepalese Financial Institutions"

and found the thesis to be original work of the student and written according to the prescribed format. We recommend thesis to be accepted as partial fulfillment for **"Masters in Business Studies"(MBS).**

Viva- Voce Committee

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RECOMMENDATION

This is to certify that the thesis

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"Asset and Liability Management in Nepalese Financial Institutions"

has been prepared as approved by this department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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Declaration

I, Hasan Shah, hereby, declare that this thesis entitled **"Asset and Liability Management in Nepalese Financial Institutions",** submitted to Office of Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (MBS) under the close supervision and guidance of Dr. Kamal Das Manandhar and Mr. Dhurba Subedi.

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This study describes various aspects of the on- and off-balance sheet asset-liability structure of the Australian banking sector, over the period 1975 to 1995, and provides an aggregate perspective of the influence several factors have on the sectors' asset-liability structures. The analysis reveals the dynamic nature of asset-liability structures in Australian banking, and the extensive changes made to these structures over the period. These structures were influenced by changes in financial market volatility, the regulatory structure and the state of the economy, although the most significant changes may be linked more to general macroeconomic conditions (such as the degree of openness of the economy) than to the other factors.

What is ALM ?

ALM is a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of a bank. It is the management of structure of balance sheet (liabilities and assets) in such a way that the net earning from interest is maximised within the overall risk-preference (present and future) of the institutions. The ALM functions extend to liquidly risk management, management of market risk, trading risk management, funding and capital planning and profit planning and growth projection.

Benefits of ALM - It is a tool that enables bank managements to take business decisions in a more informed framework with an eye on the risks that bank is exposed to. It is an integrated approach to financial management, requiring simultaneous decisions about the types of amounts of financial assets and liabilities - both mix and volume - with the complexities of the financial markets in which the institution operates

The concept of ALM is of recent origin in India. It has been introduced in Indian Banking industry w.e.f. 1st April, 1999. ALM is concerned with risk management and provides a comprehensive and dynamic framework for measuring, monitoring and managing liquidity, interest rate, foreign exchange and equity and commodity price risks of a bank that needs to be closely integrated with the banks' business strategy.

Therefore, ALM is considered as an important tool for monitoring, measuring and managing the market risk of a bank. With the deregulation of interest regime in India, the Banking industry has been exposed to the market risks. To manage such risks, ALM is used so that the management is able to assess the risks and cover some of these by taking appropriate decisions.

The assets and liabilities of the bank's balance sheet are nothing but future cash inflows or outflows. With a view to measure the liquidity and interest rate risk, banks use of maturity ladder and then calculate cumulative surplus or deficit of funds in different time slots on the basis of statutory reserve cycle, which are termed as time buckets.

As a measure of liquidity management, banks are required to monitor their cumulative mismatches across all time buckets in their Statement of Structural Liquidity by establishing internal prudential limits with the approval of the Board / Management Committee.

The ALM process rests on three pillars:

i. ALM Information Systems
    - Management Information Systems
    - Information availability, accuracy, adequacy and expediency
ii. ALM Organisation
    - Structure and responsibilities
    - Level of top management involvement
iii. ALM Process
    - Risk parameters
    - Risk identification
    - Risk measurement
    - Risk management
    - Risk policies and tolerance levels.

	As per RBI guidelines, commercial banks are to distribute the outflows/inflows in different residual maturity period known as time buckets. The Assets and Liabilities were earlier divided into 8 maturity buckets (1-14 days; 15-28 days; 29-90 days; 91-180 days; 181-365 days, 1-3 years and 3-5 years and above 5 years), based on the remaining period to their maturity (also called residual maturity). All the liability figures are outflows while the asset figures are inflows. In September, 2007, having regard to the international practices, the level of sophistication of banks in India, the need for a sharper assessment of the efficacy of liquidity management and with a view to providing a stimulus for development of the term-money market, RBI revised these guidelines and it was provided that • (a) the banks may adopt a more granular	

approach to measurement of liquidity risk by splitting the first time bucket (1-14 days at present) in the Statement of Structural Liquidity into three time buckets viz., next day , 2-7 days and 8-14 days. Thus, now we have 10 time buckets.

After such an exercise, each bucket of assets is matched with the corresponding bucket of the liabililty. When in a particular maturity bucket, the amount of maturing liabilities or assets does not match, such position is called a mismatch position, which creates liquidity surplus or liquidity crunch position and depending upon the interest rate movement, such situation may turnout to be risky for the bank. Banks are required to monitor such mismatches and take appropriate steps so that bank is not exposed to risks due to the interest rate movements during that period.

- (b) The net cumulative negative mismatches during the Next day, 2-7 days, 8-14 days and 15-28 days buckets should not exceed 5 % ,10%, 15 % and 20 % of the cumulative cash outflows in the respective time buckets in order to recognise the cumulative impact on liquidity.

The Board's of the Banks have been entrusted with the overall responsibility for the management of risks and is required to decide the risk management policy and set limits for liquidity, interest rate, foreign exchange and equity price risks.

Asset-Liability Committee (ALCO) is the top most committee to oversee the implementation of ALM system and it is to be headed by CMD or ED. ALCO considers product pricing for both deposits and advances, the desired maturity profile of the incremental assets and liabilities in addition to monitoring the risk levels of the bank. It will have to articulate current interest rates view of the bank and base its decisions for future business strategy on this view.

Rate Sensitive Assets & Liabilities : An asset or liability is termed as rate sensitive when

(a) Within the time interval under consideration, there is a cash flow,
(b) The interest rate resets/reprices contractually during the interval,
(c) RBI changes interest rates where rates are administered and,
(d) It is contractually pre-payable or withdrawal before the stated maturities.

Assets and liabilities which receive / pay interest that vary with a benchmark rate are re-priced at pre-determined intervals and are rate sensitive at the time of re-pricing.

INTEREST RISK :

The phased deregulation of interest rates and the operational flexibility given to banks in pricing most of the assets and liabilities imply the need for the banking system to hedge the Interest-Rate Risk. Interest Rate Risk is the risk where changes in market interest rates might adversely affect the Bank's Net Interest Income. The gap report should be generated by grouping interest rate sensitive liabilities, assets and off balance sheet positions into time buckets according to residual maturity or next repricing period, whichever is earlier. Interest rates on term deposits are fixed during their currency while the advance interest rates are floating rates. The gaps on the assets and liabilities are to be identified on different time buckets from 1–28 days, 29 days upto 3 months and so on. The interest changes should be studied vis-a-vis the impact on profitability on different time buckets to assess the interest rate risk.

GAP ANALYSIS :

The various items of rate sensitive assets and liabilities and off-balance sheet items are classified into time buckets such as 1-28 days, 29 days and upto 3 months etc. and items non-sensitive to interest based on the probable date for change in interest.

The gap is the difference between Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL) in various time buckets. The positive gap indicates that it has more RSAS than RSLS whereas the negative gap indicates that it has more RSLS. The gap reports indicate whether the institution is in a position to benefit from rising interest rates by having a Positive Gap (RSA > RSL) or whether it is a position to benefit from declining interest rate by a negative Gap (RSL > RSA).

www.bangladesh-bank.org/mediaroom/circulars/fid/assetliability.pdf