

# ASSET LIABILITY MANAGEMENT GUIDELINE



**CENTRAL ACCOUNTS DEPARTMENT-1**



**RAJSHAHI KRISHI UNNAYAN BANK**

# **ASSET-LIABILITY MANAGEMENT (ALM) GUIDELINE**



## **RAJSHAHI KRISHI UNNAYAN BANK**

**HEAD OFFICE, RAJSHAHI**

**CENTRAL ACCOUNTS DEPARTMENT-1**

**Asset-Liability Management (ALM) Guideline**  
**Working Committee**

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## **Preface**

Rajshahi Krishi Unnayan Bank (RAKUB), since 1987, has been significantly contributing to uphold socio-economic development of the north-west part of the country. As a state owned specialized bank, it pays due attention to the instructions and policies provided by Bangladesh Bank (BB). In accordance with Bangladesh Bank BRPD Circular No-2, dated 7th March, 2016 the bank has established guidelines for its Asset-Liability Management (ALM) practices. RAKUB ALM endeavors to plan, organize and control asset and liability volumes, maturities, qualities and rates in order to maintain a sound liquidity position and acceptable profitability as well as minimize interest rate risk.

In banking sector, asset liability management is the practice of managing various risks that arise due to mismatches between the assets and liabilities. ALM concerns with strategic balance sheet management involving risks caused by changes in the interest rates, exchange rates and the liquidity position of the bank. It is an attempt to match assets and liabilities in terms of maturities as well as to minimize Interest Rate Risk and Liquidity Risk. Therefore, ALM is termed as a risk management technique designed to earn an adequate return while maintaining a comfortable surplus of assets beyond liabilities. It is an essential process for the bank and when not well managed, creates a threat to the bank itself.

RAKUB ALM process encompasses following issues:

- Consider local regulatory issues.
- Manage asset quality.
- Review interest rate outlooks.
- Review investment portfolio and market risk management.
- Maintain sound liquidity position.
- Ensure maximum earning.
- Maintain adequate capital.
- Match volume of asset with volume of liability to avoid liquidity risk.
- Control Non Performing Assets (NPA) and create Performing Assets.

## **Part - A**

### **1.00 Asset Liability Management Policy:**

ALM is a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of a bank. It is regarded as the integral part of the financial management process. Therefore, it is essential to have a structured and systematic process to manage the Balance Sheet. RAKUB has a committee comprising of the senior management of the bank to make important decisions related to the Balance Sheet of the Bank. The committee is called Asset Liability Management Committee (ALCO) which is to meet at least once every month to analyze, review and formulate strategy to manage asset-liability and capital position of the bank.

#### **1.1 Roles and Responsibilities of ALCO:**

Major responsibilities of ALCO are defined as follows:

- Ensure that bank's measurement and reporting systems accurately convey the degrees of liquidity and market risk
- Monitor the structure and composition of bank's assets and liabilities and identify balance sheet management issues that are leading to underperformance.
- Decide on the major aspects of balance sheet structure, such as maturity and currency mix of assets and liabilities, mix of wholesale versus retail funding, deposit mix etc
- Decide on how to respond to significant, actual and expected increases and decreases in required funding
- Review maturity profile and mix of assets and liabilities
- Articulate interest rate view of the bank and decide on balance sheet strategy
- Approve and periodically review the transfer pricing policy of the bank
- Evaluate market risk involved in launching of new products
- Review deposit-pricing strategy, and
- Review contingency funding plan for the bank

Balance sheet risk management is not limited to collection of data only. Therefore, ALCO is required to understand the implications of the numbers generated from analyses and formulate appropriate responses and strategies for the bank.

#### **1.1.1 Organization of the ALCO:**

The Asset-Liability Management Committee (ALCO), at the apex of the diagram, guides the ALM process within the parameters set forth by the Board. It is noteworthy to state that Treasury Division is solely responsible to organize and implement ALCO. Since there is no separate Treasury Division in RAKUB and Central Accounts Department-1 (CAD-1) performs its treasury activities, the roles and responsibilities of ALCO would be carried out by the same department.

#### **1.1.2 Key Roles and Responsibilities of ALM Desk:**

The ALM Desk is responsible for day to day management of the asset-liability management risk, market risk and liquidity risk of the bank. Under the supervision of the Head of the Treasury (Head of CAD-1), RAKUB, ALM Desk should perform its responsibilities to manage the aforementioned risks. The broad responsibilities of the ALM desk are as follows:

- a) Maintain the optimum level of NPA.
- b) Oversee the overall activities of Money Market.
- c) Manage liquidity and market risk of the bank.
- d) Understand market trends for expansion of the business.
- e) Suggest proper balance sheet movement to cope up with the changing situations.
- f) Keep records of ALCO meetings etc.
- g) Oversee the growth of sustainability of assets and the liabilities

### **1.1.3 Head of Treasury; Experience, Responsibilities and Reporting Line:**

The Head of Treasury (Head of CAD-1) should have at least 10(ten) years of working experience in the bank and within it minimum 05 years in different levels of Treasury related activities. The Head of Treasury (Head of CAD-1) is the member secretary of ALCO. Head of treasury places the results of balance sheet analysis, along with recommendations in the ALCO meeting. To avoid any conflict or contradiction the head of treasury (Head of CAD-1) should directly report to the Managing Director regarding treasury/fund management related issues of the bank. The Head of Treasury (Head of CAD-1) will not in charge of any credit related major departments or Risk Management Division.

### **1.1.4 Clearance Regarding Availability of Funds from the Treasury Department (CAD-1):**

Since Central Accounts Department-1 is solely responsible for treasury/fund management of the bank, other divisions should collect necessary clearance from the same department regarding availability of fund before sanctioning of any new bulk amount of loan or expenditure. Normally the minimum limit of such bulk amount should be tk. 1.00 crore. The clearance for availability of fund should be taken in black and white at least 03 days prior to the disbursement/payment date.

## 1.2 The ALCO Process:

The details of ALCO process is set out as follow:

### 1.2.1 Constitution of the ALCO:

The Managing Director of the bank shall be the chairman of ALCO. Head of Treasury (Head of CAD-1) shall work as the member secretary of ALCO. The committee shall be constituted as follows:

Sl. No.	Designation	Position in ALCO
1.	Managing Director	Chairman
2.	Deputy Managing Director	Member
3.	General Manager (Admin)	Member
4.	General Manager (Operation)	Member
5.	General Manager (Accounts, Audit & Recovery)	Member
6.	Head of Branches Control Department	Member
7.	Head of Loans and Advances Department-1	Member
8.	Head of Loans and Advances Department-2	Member
9.	Head of Foreign Exchange Department	Member
10.	Head of Risk Management Department	Member
11.	Head of Compliance Department	Member
12.	Head of Loan Recovery Department-1	Member
13.	Head of Loan Recovery Department-2	Member
14.	Head of Information and Communication Technology Department	Member
15.	DGM / Manager Local Principal Office	Member
16.	Head of Central Accounts Department-1	Member Secretary

Head of ALM desk should be a permanent invitee of the ALCO meeting. Following the requirements of any context the chairman of ALCO can invite other related person.

### **1.2.2 Meeting of the Committee:**

The ALCO of RAKUB has to sit at least once in a month to discuss various aspects of ALM. Apart from the regular monthly meeting, special ALCO can also be arranged as and when any contingent situation arises. The presence of all the members or his/her representative (in case of the absence of the member) should be ensured in every meeting.

### **1.2.3 Key Agenda:**

The key agenda of ALCO meeting is as below, but not limited to, the following:

- (i) Confirmation of minutes of previous meeting
- (ii) Review of actions taken in previous ALCO and the status of implementation
- (iii) Review of monthly changes in various key parameters
- (iv) Overall fund position including loanable funds, maintenance of CRR and SLR, LCR and NSFR position, Structural Liquidity Profile, etc.
- (v) Asset position:
  - Concentration
  - Quality
- (vi) Liability position:
  - Deposit mix
  - Market situation
  - Concentration
  - Cost of fund
- (vii) Foreign exchange related asset and liability position:
  - Foreign exchange inflow
  - Foreign exchange outflow
- (viii) Economic and Market Status and Outlook
- (ix) Liquidity Risk related to the Balance Sheet
- (x) Review of the price / interest rate structure:
  - Interest rate risk in banking book
  - Interest rate risk in trading book

- Equity price risk

(xi) Off-balance sheet position:

- Unused portion of lines of credit (undrawn commitments)
- Guarantees

(xii) Capital Market Investment position: Solo and Consolidated basis (if any).

(xiii) Investment in associates

(xiv) Leverage Ratio

(xv) Status of Deposit, Recovery, Import, Export, Remittance and Loan & Advances

(xvi) Fund management analysis.

(xvii) Liquidity Position:

- Foreign Currency
- Local Currency
- Projected Cash Inflow & Cash Outflow
- Balance Sheet Analysis

Action will be taken by whom and when would be clearly mentioned in every ALCO minutes.

#### **1.2.4 ALCO Paper:**

An ALCO paper, covering all the above issues should be presented in every meeting of ALCO. The Treasury Division (CAD-1) is responsible to present the paper incorporating all necessary information, analysis and suggestions from the related divisions including own opinion, if necessary, on the related issues. A separate observation from Risk Management Unit regarding asset- liability management risk, market risk and liquidity risk should also be included in the ALCO paper. The decision taken against each issue should be carefully noted and preserved for not less than 3 years.

#### **1.2.5 Contents of the ALCO Paper:**

The following items are the key elements that an ALCO paper contains and need ALCO's oversight on.

#### **1.2.5.i Confirmation of Minutes of Last Meeting:**

This is formal confirmation of the last ALCO meeting minutes.

#### **1.2.5.ii Review of the Action against Decision of the Previous Meetings:**

This means detailed discussion on the progress on the action against decision of the previous meetings and review deadline if appropriate.

#### **1.2.5.iii Review of Economy and Markets:**

This section starts with the review of key national & global economic developments. Specific reference to countries whose economies have direct bearing on Bangladesh's economy (exports, imports, remittances, etc.) is important.

It also added on with an update of the local economy and money market. On the economic items that must include GDP growth, inflation, credit growth, govt. borrowing, export, import, remittance, FX Reserve and current account balance. On market items it must include movement of interbank market liquidity, call money rates, term money rates, govt. securities yield and a comparison of interest rate offered by comparable banks is important. The idea of this section is to identify the key elements in the context of global and national economy and the impact likely to have on the business of the bank in Bangladesh. ALCO uses this information for making decision regarding the Bank's business.

#### **1.2.5.iv Review of Balance Sheet and Liquidity Limits:**

This part produces the analysis of balance sheet, structural balance sheet limits and their utilization- AD ratio, Commitments, LCR, NSFR, Loan and Deposit Concentrations, etc. It is important to observe the last few months' trends to get a better perspective. Items which are not at acceptable levels are reviewed further in details and corrective actions proposed. It also presents the short term liquidity management limits and their utilization, wholesale borrowing Limit etc. Observation of last few months' trends' is

important to get a better perspective.

#### **1.2.5.v Review of the Status of Regulatory Compliance:**

This section lists the various regulatory liquidity requirements like as CRR, SLR, Capital Adequacy, etc. and compliance with those.

#### **1.2.5.vi Top 10 Depositors' List:**

This section presents the top 10 depositors of RAKUB and their share of the total deposits. The data should be incorporated at tenor-wise and the share of each of the depositors as percentage of total deposits of the bank. The trend of the previous months will give important perspective. Maturity bucketing for each of the deposits (call, 1 week, 1 month, etc.) will be helpful. This helps the bank to have a greater visibility on where the deposit concentrations are coming from. It is important to track the behavior of these deposits and take measures so as to avoid any untoward liquidity issues. The corporate deposits and interbank deposit should also be highlighted in this section.

#### **1.2.5.vii Top 10 Borrowers' List:**

This section lists the top 10 borrowers of RAKUB. The data should be incorporated at tenor-wise and the share of each of the borrowers as percentage of total Loans of the bank. The trend of the previous months will give important perspective. Maturity bucketing for each of the loans (call, 1 week, 1 month, etc.) will be helpful in this regard. This helps the bank to have a greater visibility to detect loan concentrations of the bank. It is important to track the behavior of these borrowers and take measures so as to avoid any untoward liquidity issues. Lending to wholesale market should also be highlighted in this section.

#### **1.2.5.viii Capital Maintenance:**

This section includes details and composition of the capital position of the bank in relation to the minimum capital requirement. This must be compared to future expected capital requirement due to forecasted asset growth. It is also important to look at the Return on Risk Weighted Assets of the bank – again the trend of the past few quarters/years will give better perspective- so as to understand how efficiently the bank is deploying its capital.

#### **1.2.5.ix Details of Loans and Deposits Movement:**

This section is to analyze the detailed trend of loan and deposits. It must be segment-wise (retail, corporate, etc.), product-wise (Current, Savings, SND, Fixed and Term Deposit etc.) and currency wise. AD ratio movements for the last few periods are also included in this section.

#### **1.2.5.x Loans and Deposits Projections:**

Monthly projections of loans and deposits of the bank for the next 3-6 month and whole year are presented to ALCO by the respective divisions. The information is used by ALCO to understand future liquidity requirements and strategies accordingly. In this respect, it should be careful to review the historical projection accuracy to understand the level of adjustments that can be qualitatively applied to the current projections. The projections should be given both for Foreign Currency & Local Currency as this is more meaningful. If deemed important, ALCO can also seek segment-wise projections (e.g. retail, corporate, etc.) in addition to total loans deposit projections from the respective divisions.

#### **1.2.5.xi Trend of Lending Rates and Deposit Rates:**

This section includes the trend of the lending and deposit rates. Product-wise, segment wise and currency-wise breakdown of the rates is incorporated here. The lending and

deposit rates of other contemporary competitive banks can also be stated here.

#### **1.2.5.xii Other Business Key Indicators:**

Apart from the above mentioned issues the key business indicators directly related to the profitability of the business are highlighted here.

#### **1.2.6 Responsibility of Related Divisions:**

All the divisions should be liable to provide necessary information, analysis and suggestions to Central Accounts Department-1 regarding the issues related with them which are stated in Section 1.2.3 (Key Agenda) within a stipulated time and the same will be incorporated in the ALCO Paper. The same department is also liable to implement the decisions made in ALCO meeting.

#### **1.3 Major Issues:**

Following are the major issues regarding asset and liability management within the scope of ALM policy of the bank.

##### **1.3.1 Market Risk:**

The risk arising from market risk factors such as interest rates, foreign exchange rates, equity prices and the roles and responsibilities of board and senior management of the bank have been discussed in the Appendix-I. The ALCO of the bank should observe various limits which must be approved by the board and ensure proper and effective implementation of the same.

### **1.3.2 Liquidity Risk:**

Liquidity risk arises from either the bank's inability to meet its obligations as they fall due or to fund increases in assets without incurring unacceptable cost or losses. There should be a vivid Liquidity Risk Management Policy of the Bank with a detailed view regarding the roles and responsibilities of board and senior management of the bank as well as liquidity risk detection and mitigation techniques. The ALCO should closely monitor the developments around various liquidity issues in each and every meeting. The effectiveness of the Contingency Funding Plan must be verified in the meetings. It is also mandatory for the Treasury Department (CAD-1) to inform the management regarding various liquidity issues like as CRR, SLR, SLP, LCR, NSFR, ADR and IDR in every ALCO meeting of the bank. A detailed Liquidity Risk Management Policy is illustrated in Appendix-II.

## **PART - B : POLICY STATEMENT**

### **2.00 Policy Statement:**

For sound maintenance of Asset Liability Risk Management (ALM), Bangladesh Bank, as regulatory authority, has set different types of policies. In accordance with the policies set out by B B, the bank is to comply with the following policies and limits:

### **2.1 Basel III Liquidity Ratios:**

Bangladesh Bank has issued separate guidance note on LCR and NSFR under Basel III. The Basel Committee has introduced new global liquidity standards as a part of the Basel III capital regime, including the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The effect was to increase bank's short and long-time liquidity resilience. The LCR addresses whether the bank has adequate high quality liquid assets to survive stressed liquidity conditions over a 30-day period, while the NSFR guides banks to adopt more stable sources of funding over the long time. RAKUB measures these ratios that are key to liquidity measurement and management.

#### **2.1.1 Liquidity Coverage Ratio (LCR):**

Liquidity Coverage Ratio (LCR) is a new liquidity standard introduced by the BCBS (Basel Committee for Banking Supervision). This standard aims to ensure that the bank has an adequate stock of unencumbered High Quality Liquid Assets (HQLA) which can be converted into cash at little or no loss of value to meet its liquidity needs for 30 calendar days, i.e in a stressed scenario. The minimum acceptable value of this ratio is 100 percent.

#### **2.1.2 Measurement of LCR:**

To measure LCR it requires three important quantities to be defined:

- A. Total value of stock of high quality liquid assets

- B. Total cash outflows of next 30 days (stressed scenario)
- C. Total cash inflows of next 30 days (stressed scenario)

LCR requirement is met if A is greater than B – C; i.e. if high quality liquid assets exceed net cash outflows under the stressed scenario. (To make the metric even more conservative, C is capped at 75 percent of B.)

### 2.1.3 The Equation:

$$\text{LCR} = \frac{\text{Stock of high quality liquid assets}}{\text{Total net cash outflows over the next 30 calendar days}} \geq 100\%$$

Here, Stock of high quality assets = A and

Total net cash outflow over the next 30 calendar days = B–C, where C is maximum 75% of B.

### 2.1.4 Net Stable Funding Ratio (NSFR):

Net Stable Funding Ratio (NSFR) is another new standard introduced by the BCBS (Basel Committee for Banking Supervision). The NSFR aims to limit over-reliance on short-term wholesale funding during times of abundant market liquidity and encourage better assessment of liquidity risk across all on and off-balance sheet items. The minimum acceptable value of this ratio is 100 percent, indicating that available stable funding (ASF) should be at least equal to Required Stable Funding (RSF).

### 2.1.5 Measurement of NSFR:

The calculation of the NSFR requires two quantities to be defined:

- D. Available stable funding (ASF)
- E. Required stable funding (RSF).

NSFR is met if ASF exceeds RSF, i.e. if  $\text{ASF}/\text{RSF} > 1$  or 100%.

### 2.1.6 The Equation:

$$\text{NSFR} = \frac{\text{Available amount of stable funding (ASF)}}{\text{Required amount of stable funding (RSF)}} > 100\%$$

### 2.2 Leverage Ratio:

In order to avoid building-up excessive on and off-balance sheet leverage in the banking system, a simple, transparent, non-risk based leverage ratio has been introduced.

The leverage ratio is intended to achieve the following objectives:

- a. Constrain the build-up of leverage in the banking sector which can damage the broader financial system and the economy
- b. Reinforce the risk based requirements with an easy to understand and a non-risk based measure.

A minimum Tier 1 leverage ratio of 3% is being prescribed both at solo and consolidated level.

The ratio is defined as:

$$\text{Leverage Ratio} = \frac{\text{Tier 1 Capital}}{\text{Total Exposure *}}$$

[\*after related deductions]

(\*=related deductions will be as per "Guidelines on Risk Based Capital Adequacy: Revised Regulatory Capital Framework for banks in line with Basel III" issued by BB in December 2014)

## **2.3 Other Significant Policy Statements:**

To facilitate the ALM process, the Board of the Bank has set other policy statements (keeping in mind the minimum requirements of LCR, NSFR and Leverage ratio) for the followings and conduct an annual review (at least) taking into consideration the changes in the balance sheet and market dynamics.

### **2.3.1 Advance to Deposit Ratio (ADR):**

Although commonly known as Advance to Deposit Ratio, actually the ratio is determined by putting Advance in numerator and Deposits in denominator. The ratio should be fixed in such a manner so that there will be no unnecessary liquidity pressure on the Bank in any point of time. Considering the regulatory liquidity requirements (CRR and SLR), the maximum value of the ratio shall be derived using the formula  $\{100 \% - (CRR^* + SLR^*)\}$ . Depending upon the capital base, liquidity condition, NPL status etc. and above all the maintenance of LCR & NSFR, the BoDs can decide adding highest 3.00% with the result of the above formula to fix a suitable AD ratio (BB, DoS circular no-02, dated-20.02.2018).

To keep ADR of the bank at the required level, RAKUB will take up the following strategies:

- Increasing quality lending
- Controlling large loan disbursement
- Introducing new Deposit products with minimum cost

#### **2.3.1.1 The Equation:**

The formula for calculating AD ratio is as follows:

$ADR = \text{Total Loans and Advances} / (\text{Total Time and Demand Liabilities} + \text{Interbank deposit surplus})$

### **2.3.1.2 Interbank Deposit Surplus:**

Deposit from other banks - Deposit with other banks (if negative then 0). The bank should follow the instruction of BB regarding deduction of some items to calculate total loans and advances while calculating ADR. Total Demand and Time liabilities are to be calculated according to BB, DOS Circular No.01/2014.

### **2.3.1.3 Adjustment of the AD Ratio Limit:**

It is important to adjust AD ratio limit with changing condition of the Banks' assets and liabilities. The Management of the bank has to inform the board regarding AD ratio in every meeting. So that the board will take quick decision necessary to adjust the ratio.

#### **Note:**

- CRR = bi-weekly rate as decided by BB from time to time (Current CRR is 5.5.00%)
- SLR = as decided by BB from time to time (Currently SLR is 13.00%)

### **2.3.2 Wholesale Borrowing Guidelines (WBG):**

The aim of wholesale borrowing (WB) guidelines is to set a limit for borrowed fund. The limit should be set in absolute amount based on bank's eligible capital (Tier-1 plus Tier-2) and considering liquidity needs due to maturity mismatch, borrowing capacity of the Bank and historic market liquidity. The detail WB guidelines of the bank is shown in Appendix -I I I.

#### **2.3.2.1 Wholesale Borrowing Limit:**

Wholesale Borrowing (WB) covers call borrowing, Short Notice Deposit from banks and financial institutions, placement received with maturity less than 12 months, commercial papers/similar instruments and overdrawn Nostro accounts. As a Non-Primary Dealer

bank the WB Limit is capped at 80% of the bank's eligible capital on fortnightly average basis with maximum two deviations (not more than 90% of the eligible capital of the bank) in a particular fortnight. The eligible capital determined under Basel III for any quarter will be applicable as eligible capital until it is determined for the next quarter.

### **2.3.3 Commitments:**

Total Commitments include undrawn portions of continuous loan including interest thereon and undrawn portions of term loans, outstanding irrevocable letters of credit and similar instruments, letter of guarantee, acceptances and similar instruments. Counter guarantee provided by foreign banks with BB rating grade 1 or similar, awarded by recognized international credit rating agencies against any guarantee, FC held against Back to Back LC and Margin on LC or guarantee shall be deducted from the total commitment amount.

#### **2.3.3.1 Commitment Limit:**

The commitment limit is fixed considering three important ratios. These are: i) Total Commitments to Total Assets, ii) Total Commitments to Total Eligible Capital and iii) Total Commitments to Total High Quality Liquid Assets (HQLA). The highest acceptable limits of these ratios are less than 50%, less than 500% and less than 250% respectively. The commitment limit will be the lowest amount of the three ratios mentioned above.

### **2.3.4 Structural Liquidity Profile (SLP):**

The structural liquidity profile of the Bank provides information regarding maturity transformation of assets and liabilities in a simple manner. The negative liquidity gap (if exist), derived by considering assets and liabilities both in local and foreign currencies, can be taken as a preliminary signal for the need of maturity adjustment of assets and

liabilities in different time buckets. The Maximum Cumulative Outflow ratio will be considered as an important benchmark in this regard.

### **2.3.5 Maximum Cumulative Outflow (MCO):**

MCO reflects the maximum cumulative outflow against total assets in a maturity bucket. As per BB Guideline MCO up to one month bucket will not be greater than the sum of daily minimum CRR plus SLR. For example, at the present rate of CRR and SLR, the MCO should be 18% (5% CRR+ 13% SLR) for conventional banks. MCO in the other maturity buckets should be prudently fixed by the BoDs depending on the bank's business strategy.

With a view to maintaining MCO to the target level management should emphasize on the following manners:

- a) Introduce new product for deposit mobilization
- b) Restrict large loan disbursement
- c) Concentrate more on NPL, WCL-1 & WCL-2 recovery

Maintaining MCO to the optimum level not only ensures proper liquidity in times of stress moment but also optimizes return through efficient utilization of available funds.

#### **2.3.5.1 Maximum Cumulative Outflow (MCO) Report:**

To prepare a liquidity gap report of the Bank, the sequence of activities that need to be performed is as follows:

- Segregate assets and liabilities into different time buckets based on their remaining maturities;
- Place all assets and liabilities in their appropriate time buckets;
- Identify the number of time buckets;
- Subtract maturing liabilities from maturing assets in order to determine the liquidity gap, under each bucket;
- Compute the cumulative liquidity gap.

### **2.3.5.2 The Equation:**

The formula for determining maximum cumulative outflow in one month bucket is:

$$\text{MCO} = \frac{\text{Total outflow up to one month} + \text{Total OBS exposure up to one month}}{\text{Total inflow} + \text{Net Nostro account balance} + \text{Available foreign currency balance with BB}}$$

### **2.3.6 Interest Rate Risk (IRR):**

Interest rate risk (IRR) can be defined as decline in earning or in the Bank's portfolio value due to interest rate fluctuations. Most of the balance sheet items generate revenues and costs which are indexed to interest rates; since these rates are unstable over time, so are earnings. While assuming business activity, IRR acts as a key part. Taking on excessive IRR can potentially threaten earnings and the Bank's capital base. The details of interest rate risk are shown in Appendix-I.

#### **2.3.6.1 Interest Rate Risk Limit:**

The BoDs of the bank will set a limit on the interest rate risk in the banking book. The limit should be set according to the risk appetite of the bank. The BoDs will also set the management action plan to reduce interest rate risk, if the situation wants. Both NII (Net Interest Income) and Market Value of Equity (MVE) limits and action plan should be set so that management can take necessary action instantly.

### **2.3.7 Stress Testing:**

Stress testing techniques provide a way to qualify the impact of changes in a number of risk factors on the assets and liabilities portfolio of the institution. An effective management information that ensures flow of information to the senior management to

take proper measures to avoid certain extreme conditions.

As a starting point the scope of the stress test is limited to simple sensitivity analysis and it carried out assuming three different hypothetical scenarios:

**Minor Level shocks:** These represent small shocks to risk factors.

**Moderate shocks:** It envisages medium level of shocks and the level defined in each risk factor separately.

**Major level shocks:** It involves big shocks to all risk factors and also depends separately for each risk factor.

Stress testing detects the soundness and sustainability of the bank and helps to be more shock resilient. It enables the bank to accurately assess risk and define the "risk appetite" of the organization and also provide critical information to senior management for decision around capital allocation and contingency planning.

### **2.3.8 Swapped Fund Limit:**

Swapped fund is the difference between assets and liabilities including capital denominated in the same currency. Assets and liabilities will not always in the same currencies. The Bank exposed to the risk that may not meet by its currency-wise obligations as they fall due. Swapped funds position results from reliance on foreign exchange markets and therefore needs to be controlled. Swapped funds limits are established on the maximum amount that may be swapped out of foreign currency into local currency and swapped out of local currency into foreign currency. The term Swapped Fund is not applicable to RAKUB current business activities. If required, while applicable, Swapped fund limit for Buy-Sell or Sell-Buy SWAP would be set by RAKUB, BoDs.

### **2.3.9 Contingency Funding Plan (CFP):**

There should be a liquidity contingency plan to address unforeseen circumstances in its operations and in the environment. This needs to be approved by the BoDs and reviewed at least annually to take care of changes in the balance composition. Detail Contingency Funding Plan (CFP) is included in Appendix-IV.

A contingency funding plan needs to be approved by the BoDs (ALCO in case of foreign banks). A contingency funding plan needs to be prepared keeping in mind that enough liquidity is available to meet the funding requirements in a liquidity crisis situation.

#### **2.3.9.1 Essential Characteristics of a CFP:**

An acceptable CFP should have some essential characteristics:

- ✓ The CFP should identify and assess the adequacy of financial resources (source of funds) for contingent needs. The plan should identify all back-up facilities, the conditions related to their use and the circumstances under which the bank might use them. Periodically, management should test all sources of its contingency funding plan with the goal of ensuring that there are no unexpected impediments or complications in case the bank needs to use its contingency lines. Management should understand the various conditions, such as notice periods, that could affect access to back-up funding sources.
- ✓ The CFP should distinguish between the bank's-specific and general market liquidity situations, and have appropriate responses to each situation.
- ✓ The CFP should define responsibilities and decision-making authority so that all personnel understand their role during a problem situation.
- ✓ The CFP should identify the sequence that the bank will mobilize and commit key sources of funds for contingent needs. The degree of uncertainty as to the magnitude, timing and availability of recourses may call for different priorities in

different situations.

- ✓ The CFP should address implementation issues such as procedures the bank should use to obtain emergency funds or release funds from one use to transfer to another. It must ensure that there are no constraints, such as blanket liens on all collateral, which may limit availability of other liquidity sources.
- ✓ The CFP should identify other actions necessary in the event of an unexpected contingency.
- ✓ The CFP should assess the potential for funding erosion (magnitude and rate of outflow) by source of funds under different scenarios.
- ✓ The CFP should assess the potential liquidity risk posed by other activities, such as asset sales and securitization programs.

#### **2.3.9.2 Preparation and Review / Update of CFP:**

The contingency funding plan needs to be prepared by the Treasury Department (CAD-1). The Plan needs to be reviewed/ updated by ALCO and approved by the BoDs of the bank at least annually or as it is required.

#### **2.3.9.3 Elements of a Typical CFP:**

The CFP should contain measures to ensure that the bank is able to respond to a crisis/ specific problem in the local market. The contingency funding plan identifies the trigger events that could cause a liquidity crisis and describes actions to be taken to manage the situation. A typical CFP includes the following elements:

##### **2.3.9.3.1 Trigger Events:**

Trigger events could include breach in liquidity guidelines/ ratios for certain consecutive reporting dates, not being able to meet stress cash flows, unsubstantiated rumors, difficulty in

either capital or funding, market-wise stress, etc. as appropriate.

#### **2.3.9.3.2 Contingency Management Team (CMT):**

Bank should have a specific contingency management team. The primary duty of such team is to monitor and manage stress liquidity condition of the bank.

#### **2.3.9.3.3 Purpose of the Contingency Management team:**

The purpose of the CMT is to investigate cause and magnitude of the crisis, assess steps to prevent occurrence / escalation, understand expected duration of the crisis, assess market trend and decide on remedial action to mitigate effects of the crisis.

#### **2.3.9.3.4 Details of Action Plan:**

This would include information and sources of information/ reports, review of funding sources and liabilities, plan for asset disposal/ liquidation, plan for communication, liquidity management plan, etc. It is important to clearly specify the responsible persons for each of the action items identified. This will ensure that the tasks/ activities during a crisis situation are undertaken smoothly.

#### **2.3.9.3.5 Critical Contact Information:**

Contact numbers of critical internal persons as well as central bank/ interbank contacts need to be included in the Contingency Management Plan. This will ensure that in times of a crisis, the numbers should be handy.

#### **2.3.9.3.6 Brief Summary of Regulations and Contingency Liquidity Sources:**

This will include information on CRR/ SLR and other regulatory liquidity requirements, liquidity facilities offered by central bank, and a quantification of the liquidity that may be assumed to be available from different sources.

#### **2.3.9.3.7 Regulatory Compliance:**

There should be a firm policy on compliance with Bangladesh Bank requirements relevant to ALM, such as CRR, SLR, CRAR, Single Borrower Exposure, ADR, LCR, NSFR etc.

## **Appendix-I: Market Risk Management**

### **3.00 Market Risk:**

Market risk refers to the risk of losses in the bank's trading book due to changes in equity prices and other indicators whose values are set in a public market. Banks are exposed to market risk in a variety of ways. Market risk exposure:-

- a) May be explicit in portfolios of securities, equities and other instruments that are actively traded.
- b) May be implicit such as interest rate risk due to mismatch of assets and liabilities.
- c) May arise from activities categorized as off-balance sheet items.

### **3.1 Sources of Market Risk:**

The major sources of Market Risk to which assets and liabilities of the Bank are exposed to are stated below.

- Interest Rate Risk
- Foreign Exchange Risk
- Equity Risk
- Commodity Risk

#### **3.1.1 Interest Rate Risk:**

Interest Rate Risk is the potential loss from unexpected changes in interest rates which can significantly alter a bank's profitability and market value of equity. Excess interest rate risk can significantly jeopardize the bank's incomes and capital base. Variations in the interest rates influence the bank's incomes and change its net interest revenues and the level of other interest-sensitive earnings and operative costs. That is why the effective interest rate risk management that keeps risk in reasonable limits is of vital importance for a bank's stability.

### **3.1.1.1 Types of Interest Rate Risks:**

- a) Reprising Risk
- b) Basis Risk
- c) Yield Curve Risk
- d) Embedded Option Risk

#### **3.1.1.1.1 Reprising Risk:**

As a financial broker, bank faces interest rate risk every day. The most common and debated form of interest rate risk originates from the time differences of maturity (for fixed rate), and changes in the interest rates (for floating rate) of the bank's assets, liabilities and off-balance sheet items. Although these discrepancies are fundamental for the bank's activity, they can expose the bank's income and basic economic value to unexpected fluctuations when interest rates vary. For example, a bank which finances a long term credit with a fixed interest rate with a short term deposit can experience a decrease in the future revenues and in its basic value if the interest rates rise. This decrease happens because the cash flows are fixed for the credit period while the interests paid on the funding are variable and the interest rates' increase takes place after the short-term deposit matures.

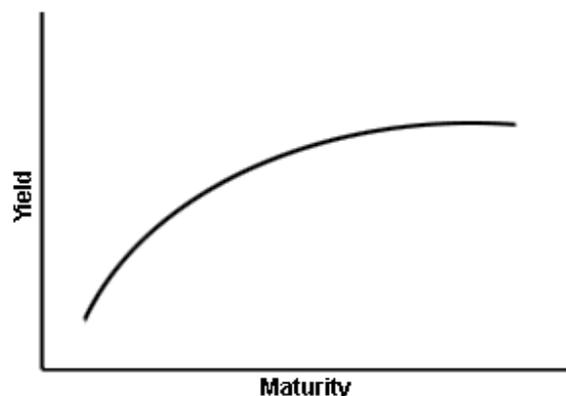
#### **3.1.1.1.2 Basis Risk:**

Interest rates on assets and liabilities do not change in the same proportion. Basis risk arises when interest rates of different assets and liabilities change in different magnitudes. The basic risk is a result from a weak correlation adjustment of the interest rates which are received and paid on various instruments otherwise having the same reprising characteristics. When the interest rates change, that absence of correlation can cause unexpected alterations in the cash flow and the spread between assets, liabilities and OBS instruments with similar maturities.

### 3.1.1.1.3 Yield Curve Risk:

The risk of experiencing an adverse shift in market interest rates associated with investing in a fixed income instrument. Risks caused due to the change in the yield curve from time to time depending on the reprising and various other factors. Yield Curve is the relation between the interest rate (or cost of borrowing) and the time to maturity of the debt for a given borrower in a given currency.

The shape of the yield curve is influenced by supply and demand. The yield curve may also be flat or hump shaped due to anticipated interest rates being steady or short term volatility outweighing long term volatility.



### 3.1.1.1.4 Embedded Option Risk:

Embedded Option Risk is the potential risk of client's right of choice. It arises from imbedded options of repayment of loans, bonds and premature withdrawal of deposits before their predetermined maturity dates. This type of risk can have an adverse impact on the profit or economic value of the bank's own capital via a decrease in the assets' profitability, increase in the funds' cost or decrease in the expected cash flow's net present value. For example, if a client repays his credit earlier during a period of decreasing interest rates, the bank will not receive the initially expected cash flow. And thus it will have to reinvest the sum at a lower interest rate.

### 3.1.1.2 Interest Rate Risk Measurement Techniques:

There are different methods for the calculation of interest rate risk, but none is appropriate for the bank simultaneously. Regardless of the diversity, all methods require solid accounting information for monitoring and timely reporting of exposures to interest rate risk. The most frequently used methods for interest rate risk measurement are as follows:

- ▶ Discrepancy analysis (GAP analysis)
- ▶ Measuring risk to net interest income (NII)
- ▶ Duration analysis
- ▶ Simulation models

#### 3.1.1.2.1 Discrepancy Analysis (GAP Analysis):

The discrepancy analysis is the most frequently used method for interest rate risk assessment. Discrepancy is the difference between interest sensitive assets and interest sensitive liabilities (including off-balance items) over a particular period of time. The discrepancy analysis includes both assets and liabilities with fixed and floating interest rate. In this method the bank's assets and liabilities are grouped in different time periods depending on their maturity; where the schedules include the following categories: 1 day, 2 days to 1 month, 1 month to 3 months, 3 to 6 months, 6 months to 1 Year, 1 year to 2 Years, 2 to 5 years and over 5 years.

There are 03 (three) options in considering discrepancy analysis:

#### Three Options:

- **A)  $RSA > RSL =$  Positive Gap**
- **B)  $RSL > RSA =$  Negative Gap**
- **C)  $RSL = RSA =$  Zero Gap**



- ✚ If a bank has a positive gap ( $RSA > RSL$ ) and interest rates rise the NII will improve since more assets than liabilities will be revaluated at higher interest rates. Conversely, if interest rates drop, revenues will decrease.
- ✚ If a bank has a negative gap ( $RSA < RSL$ ) and interest rates rise the NII will decrease since more liabilities than assets will be revaluated at higher interest rates. Conversely, if interest rates drop, revenue NII will improve.

The 'discrepancy analysis' method has several advantages. The method is easy to develop and use; the results are clear and easy to analyze; its performance is best in banks with relatively low profile of interest rate risk and no options. The basic weakness with this model is that this method takes into account only the book value of assets and liabilities and hence ignores their market value.

### 3.1.1.2.2 Measuring Risk to Net Interest Income (NII):

Gap schedules can provide an estimate of changes in bank's net interest income given changes in interest rates. The gap for particular time band can be multiplied by a hypothetical change in interest rate to obtain an approximate change in net interest income. The formula to translate gaps into the amount of net interest income at risk, measuring exposure over several periods, is:

$$\Delta \text{NII} = \sum \text{Periodic Gap} \times \text{Maturity Bucket}$$

Where,

$$\Delta \text{NII} = \text{Change in net interest income}$$

$$\Delta i = \text{Change in interest rate}$$

$$\text{Periodic Gap} = (RSA - RSL)$$

Maturity Buckets = 1 day, 2-7 days, 8 days to 1 month, 1-3 months, 3-12 months, 1-5 years and 5+ years.

The size of the interest rate movement used in the analysis can be based on a variety of factors, including historical experience, simulation of potential future interest rate

movements and the judgment of bank management. The gap reports are important to an interest rate risk management program because they indicate how much net interest income is at risk, and, to some extent, the timing of the risk. However, gap analysis has a number of shortcomings.

- a) gap analysis does not capture basis risk or investment risk and is generally based on parallel shifts in the yield curve;
- b) gap analysis does not take account of variation in the characteristics of different positions within a time band;
- c) gap analysis does not account for the time value of money;
- d) gap analyses fail to capture variability in non-interest revenue and expenses, which is potentially an important source of risk to current income.

#### **3.1.1.2.3 Duration Analysis:**

The duration is a measure for the percentage deviation of the economic value of an individual position which will occur at a small change of the interest rates. It measures the relative sensitivity of the value of these instruments to changing interest rates (the average term to re-pricing), and therefore reflects how changes in interest rates will affect the bank's economic value, that is, the present value of equity. It shows the time and amount of cash flows which are received before the instruments' contractually- agreed maturity.

Duration analysis can be of three types;

- Simple duration
  - Modified duration.
  - Effective Duration
- 
- **Simple Duration:** Simple duration is expressed in time units. It is assumed for the positions that fall into each time bucket. The durations are then multiplied by an assumed change in interest rates to construct a weight for each time band. In some

cases, different weights are used for different positions that fall within a time band.

- **Modified Duration:** In the financial circles the term duration usually refers to modified duration which is expressed in ratio. Modified duration is a variety of the simple duration which calculates the interest rate risk sensitivity of the instruments' price.
  
- **Effective Duration:** Effective Duration further refines the modified duration and is particularly useful when a portfolio contains callable securities. It uses simulation techniques to calculate the change in price of an instrument for a given change in interest rates. For assets with variable cash flows, it is appropriate to calculate the effective duration rather than the modified duration.

#### **3.1.1.2.4 Simulation Models:**

Banks having complex financial instruments or otherwise having complex risk profiles may employ more sophisticated interest rate risk measurement systems. Simulation models are sophisticated models and a valuable complement to gap and duration analysis. The models include a process of generating several interest rate scenarios over a time period. It utilizes computer power to provide what if scenarios, for example: What if:

- The absolute level of interest rates shift
- Marketing plans are under-or-over achieved
- Margins achieved in the past are not sustained/improved
- Bad debt and prepayment levels change in different interest rate scenarios

Simulation is used to measure interest rate risk by estimating what effect changes in interest rates, business strategies and other factors will have on net interest income, net income and interest rate risk positions. Simulation models can also be used to calculate the present value and durations of assets and liabilities. The main advantage of the simulation methods is that they are dynamic and forward-oriented. Bank can change their interest rate scenarios depending on many factors such as pricing and structure of assets and liabilities.

The accuracy of the models described above deepened on the validity of the used output data. If output data is incorrect, the results cannot accurately reflect the interest rate risk to which the bank is exposed. Another weakness of those models is that they require technical experience for their development and detailed information about maturities and interest rates.

### **3.1.1.3 Interest Rate Risk (IRR) Management :**

IRR management is one of the key strategic and policy issues for the Bank's management. If, for example, the Bank has more rate-sensitive liabilities than assets, a rise in interest rates would reduce profitability, while a decline in interest rates will raise Bank's profits.

The principal objectives in managing interest rate risk are: to ensure an optimal and stable income stream while controlling risks within tolerable parameters; and to manage the level of the exposure to adverse movements of interest rate in order to limit the potential impact thereof.

#### **Key Indicators of IRR**

- Net Interest Income (earning perspective).
- Market Value of Equity (economic value perspective).

#### **Sources of IRR**

- The regulatory environment
- Government policy related to economic growth indicators
- The size and sources of interest-bearing assets and liabilities.
- Liquidity risk
- Market and operational risk
- Credit risk

### **3.1.2 Foreign Exchange Risk:**

Foreign exchange risk is the risk that a mismatch between the composition of asset and liabilities (in a particular foreign currency) may have an adverse effect on net cash flow and the value of the Bank's net equity due to movements in exchange rate.

### **3.1.3 Equity Risk:**

Equity Risk is the risk that arises due to the decrease of fair value of equities as a result of changes in the levels of equity indices and the value of individual stocks. These losses could arise because of changes in the value of listed shares held directly by the bank; changes in the value of listed shares held by a bank subsidiary; changes in the value of listed shares used as collateral for loans from a bank or a bank subsidiary, whether or not the loan was made for the purpose of buying the shares; and changes in the value of unlisted shares.

The equity risk is "one-sided" – equity securities must be held at the lower of cost or market value. If market value drops below cost, the bank is required to form loss allowances or "provisions" on the liability side of the balance sheet, by means of an expense on the profit and loss account. However, if market values rise above cost, there is no corresponding income recorded unless the security is sold. Even though the one-sided risk is purely in an accounting sense, it will have a real implication for banks that fall below required levels of regulatory capital because of declines in the market value of securities they hold. Accordingly, it is vitally important for banks to measure, monitor and control their equity market risk.

#### **3.1.3.1 Effective Equity Price Risk Management**

There should be an effective equity risk management system with following criteria:

- a) Policies for equity investments reflect the board's risk appetite and provide clear authorities, conservative limits and assigned responsibilities.
- b) These policies permit risk taking authority consistent with the expertise of bank personnel;
- c) Senior management has broad capital markets experience, established strong policy controls and risk limits.
- d) Policy exceptions properly approved. There are formal procedures to report how and why exceptions have occurred and how they have been resolved.
- e) Trading and sales personnel have broad experience in the products traded, technically competent and comfortable with the bank's culture.
- f) Risk management personnel have depth understanding of equity market risk and risk management principles, including VaR.
- g) Equity investments in companies that the bank have never before invested in are subject to a formal review program, with all relevant bank units participating in risk assessment and control procedures.
- h) The firms in whose shares the bank or its subsidiary is considering investing is analyzed rigorously and by reviewing as much or even more financial information, as would be reviewed in a credit decision.
- i) Management reports are prepared independently of the investing, trading function and provide a comprehensive and accurate summary of investing and trading activity. Management at all levels has to understand and monitor equity market risk.
- j) Incompatible duties must be properly segregated. Risk monitoring, valuation and control functions are independent of the trading and investing functions.
- k) The bank has to conduct stress tests regularly and a precise understanding and measurement of how much and why profitability, balance sheet capital, and regulatory capital will be affected by major declines in the equity market

overall, or in the value of individual shares.

- l) For share investment the bank has to devote significant staff resources to obtain, verify and analyze financial information on these companies.

### **3.1.3.2 Securities Portfolio Management Process:**

To develop and maintain a sound securities portfolio, the bank must have:

- i. an effective formal evaluation process that provides for an objective analysis and assessment of securities investment proposals; and
- ii. clearly defined, prudent and appropriate levels of delegation of securities transaction approval authority, formally established in writing.

### **3.1.3.3 Securities Portfolio Monitoring and Controlling Procedures:**

The bank needs to develop and implement effective and comprehensive procedures, accounting policies and information systems to monitor and manage the characteristics and quality of its securities portfolio. These procedures should be appropriate to the size and complexity of the bank's securities activities and, at a minimum, need to include:

- i. Systems to measure and monitor securities positions;
- ii. Controls governing the management of the securities portfolio; and
- iii. Independent inspections or audits.

#### **l) Systems to Measure and Monitor Securities Portfolio:**

Managing securities activities requires a clear understanding of the nature and characteristics of the securities portfolio and securities positions. To make these determinations, the bank needs to ensure that:

- a) effective information systems are developed and used to appropriately record, regularly monitor and evaluate the securities portfolio;
- b) appropriate and conservative accounting policies and procedures are developed, documented and implemented to properly classify and carry securities on the books

of account of the bank and recognize income related to such securities.

## **II) Securities Portfolio Management Controls:**

Effective procedures and controls ensure that securities activities are in compliance with the bank's securities portfolio management policies and provide safeguards to protect a bank from potential losses by ensuring that unauthorized exposure does not occur from improper or uncontrolled securities activities.

The key elements of any securities portfolio management control program are well-defined guidelines governing:

a) organizational controls to ensure that there exists a clear and effective segregation of duties between those persons who authorize, initiate or supervise securities activities and those persons who are responsible for operational functions such as the physical custody of securities, or arranging prompt and accurate settlement of securities transactions, or account for securities activities;

b) procedural controls to ensure that securities are properly recorded and accounted for by the bank, transactions are settled in a timely and accurate manner and unauthorized securities activities are quickly identified and reported to the management; and

c) controls to ensure that securities activities are monitored frequently against the bank's securities portfolio management policies at the same time risk limits, and excesses reported.

Moreover, it is to be ensured that employees conducting securities trading activities on behalf of the bank do so with a written code of conduct or guideline governing securities dealing. Such a guideline or code of conduct should provide guidance respecting trading with related parties and transactions in which potential conflicts of interest exist. These should include trading with affiliated entities, personal trading and investment activities of securities portfolio management personnel, including trading on insider information and taking personal gain from one's position, and trading relationships with securities dealers with whom the bank deals.

### **III) Independent Inspection/Audit:**

Independent inspections/audits provide an objective assessment of the securities portfolios' existence, quality and value, the integrity of the securities portfolio management process, and they promote the detection of problems relating thereto. The bank should use them to ensure compliance with, and the integrity of, the securities portfolio management policies and procedures. Independent inspections/audits should, at a minimum, and over a reasonable period of time, test the bank's securities portfolio management activities in order to:

- a) ensure that securities activities are in compliance with the bank's securities portfolio management policies and procedures, and with the laws and regulations to which these activities are subject;
- b) ensure that securities transactions are duly authorized and accurately and completely recorded on the books of the bank;
- c) ensure that recorded securities are conservatively valued on the books of the bank;
- d) confirm that securities held by depositories to the order of the bank conform with the records of the bank;
- e) ensure that management has established suitably designed controls over securities positions and that such controls operate effectively;
- f) ensure the adequacy and accuracy of management information reports regarding the bank's securities portfolio management activities; and
- g) ensure that personnel involved in securities portfolio management are provided with accurate and complete information on the bank's securities portfolio management policies and risk limits and have the expertise required to make effective decisions consistent with these policies.

#### **3.1.3.4 Securities Portfolio Concentration Limits:**

Clearly defined and documented securities portfolio concentration limits ensure that the nature and level of a bank's exposure in the form of securities position is appropriately diversified and does not exceed sound and prudent limits. Securities portfolio

concentration occurs when a bank's securities portfolio contains an excessive level of exposure to one type or class of security or a single or group of associated issuers of securities.

At a minimum, securities portfolio diversification policies must place sound and prudent aggregate and individual exposure limits for each type or class of security, and for single issuers and groups of associated issuers in which the bank is permitted to invest. Usually, limits by class of security include limits for how much of the portfolio should be made up of specific types of securities such as equities and the portfolio concentration by industrial sector. Such limits need to be established in the context of the bank's aggregate exposure to a single issuer or group of associated issuers in terms of both securities and credit exposures. The management of such aggregate exposures is usually done at a level senior to securities traders and lending personnel so as to ensure that appropriate "firewalls" are maintained between the securities portfolio and credit risk management areas of the bank. Securities concentrations by single or associated issuer need to be reviewed regularly.

#### **3.1.3.5 Securities Analysis and Assessment:**

Securities investment decisions should be made only after careful examination and consideration of several areas including:

a) the bank's securities portfolio management policies, and other corporate objectives and policies, such as the nature of the bank's liabilities and the need to maintain adequate liquidity;

b) potential risks and returns related to a particular security within the overall context of the bank's securities portfolio management policies, the composition of the securities portfolio and the reasonable expectation of a fair return or appreciation given the nature of the security, and the risk of loss or impairment;

c) current and projected regulatory and economic/financial environment under which

securities transactions are made; and

- d) investment alternatives.

### **3.1.3.6 Securities Transaction Approval Authorities:**

Clearly defined and appropriate levels of securities transaction authority help to ensure that the bank's securities activities are appropriately undertaken and that securities positions do not exceed the limits established under its securities portfolio management policies.

Authorities may be absolute, incremental or a combination thereof, and may also be individual, pooled or shared within a committee. The delegation of authority needs to be clearly documented, and should include as a minimum:

- a) the absolute and/or incremental securities transaction approval being delegated;
- b) the units, individuals, positions or committees to whom securities transaction authority is being delegated;
- c) the ability of recipients to further delegate approval authority; and
- d) the restrictions, if any, placed on the use of delegated authority.

The degree of delegation of securities transaction authority will depend on a number of variables including:

- i. the bank's securities portfolio management objectives and overall risk philosophy;
- ii. the quality of the securities portfolio;
- iii. the ability of the bank to absorb losses;
- iv. the size and types of securities and the complexities of risks being assessed; and

- v. the experience and ability of the individuals responsible for carrying out the securities portfolio management activities.

Assessments of the securities portfolio management activities should be presented to the bank's board on a timely basis for review.

### **3.1.3.7 Measuring Equity Price:**

#### **3.1.3.7.1 Value at Risk (VaR):**

The Value at Risk model (VaR) is the most common measurement method used by the investors to generalize their market risk exposures. Risk is about the odds of losing money, and VaR is based on that common-sense fact. By assuming investors care about the odds of a really big loss, VaR answers the question, "What is the worst-case scenario?" or "How much is the loss in a really bad month?"

A VaR statistic has three components: a time period, a confidence level and a loss amount (or loss percentage). Following are examples of variations of the question that VaR answers:

- What is the most - with 95% or 99% level of confidence - expect to lose over the next month?
- What is the maximum percentage - with 95% or 99% confidence - expect to lose over the next year?

Generally there are three methods of computing VaR:

- a) Parametric or variance-covariance method
- b) Historical simulation method
- c) Monte Carlo simulation method

Among these methods, the historical simulation method is simple to apply and fairly straightforward to explain. Data sets used for this method are easily available. Therefore, the investors are encouraged to calculate VaR for secondary market shares

that are held for trading using historical simulation method. However, to calculate the VaR for overall investment portfolio of a bank, the variance - covariance method is also generally used method.

**(a) Variance-Covariance Method:**

According to the parametric VaR method (Variance-covariance method), the most important factor for risk determination of a position is to identify its' volatility. The volatility can be calculated with the aid of the standard deviation. The standard deviation of a composite portfolio with two sub-portfolios consists of three elements:

- I) standard deviation of the first portfolio;
- II) standard deviation of the second portfolio;
- III) factor showing a correlation between the two portfolios.

The following formula can be used to assess the VaR of a portfolio consisting more than two stocks:

Portfolio VaR= Total Portfolio X SD of Portfolio, Where,

$$\text{Standard Deviation, SD} = [S_1^2 + S_2^2 + S_3^2 + 2S_1S_2 P (1, 2) + 2 S_1S_3P (1,3) + 2 S_2S_3 P (2,3)]^{1/2}$$

Here,

$S_1$  = the standard deviation or volatility of the first asset

$S_2$  = the standard deviation or volatility of the second asset  $S_3$  = the standard deviation or volatility of the third asset

P = Correlation

**(b) Historical Simulation Method:**

The historical simulation method is the most popular and simplest method which simply re-organizes actual historical returns, putting them in order from worst to best. It then assumes that history will repeat itself, from a risk perspective.

In the following data sheet last calendar month daily return has been simulated where there are 20 daily returns. According to the the method confidence level is 95%. VaR significance level is 5% which means that among the 20 days' daily return maximum 5%

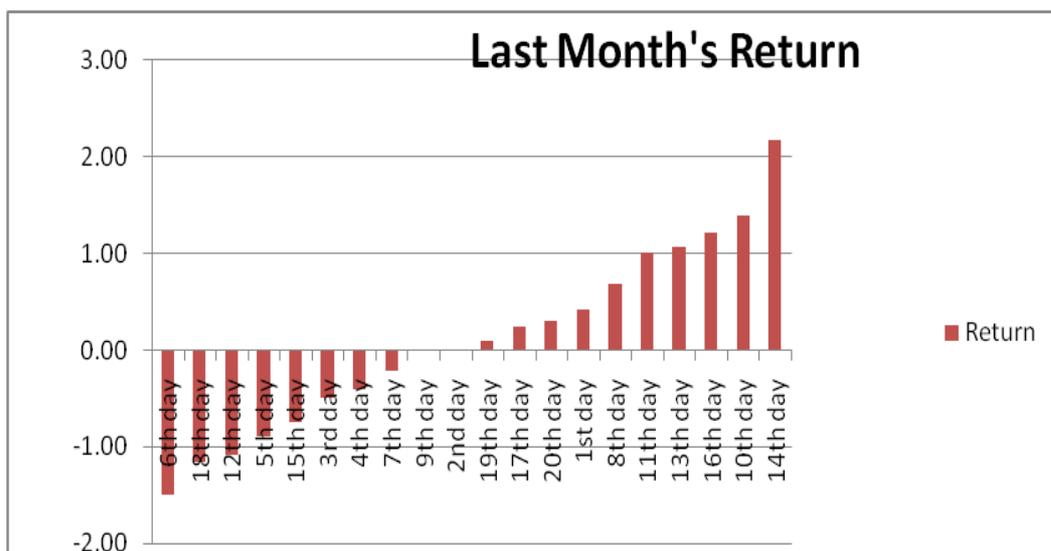
daily return (1 day) would be worse than the VaR level. It also states that in a given day maximum losses as per the confidence level would be (-) 1.18% which means that in a tk.100 investment there is 5% chance of loss of tk.1.18/- where the worst loss of the stated month is tk 1.50/- on the 6th day.

No. of days	20
Significance Level	5%

Confidence Level	95%
5th percentile H S VaR	-1.18%

Chronologically date wise return	
Date	Return (%)
1st day	0.42
2nd day	0.01
3rd day	-0.49
4th day	-0.41
5th day	-0.90
6th day	-1.50
7th day	-0.21
8th day	0.69
9th day	0.01
10th day	1.39
11th day	1.01
12th day	-1.09
13th day	1.07
14th day	2.17
15th day	-0.75
16th day	1.22
17th day	0.24
18th day	-1.16
19th day	0.09
20th day	0.30

Sorted worst to best	
Date	Return (%)
6th	-1.5
18th day	-1.16
12th day	-1.09
5th day	-0.90
15th day	-0.75
3rd day	-0.49
4th day	-0.41
7th day	-0.21
9th day	0.01
2nd day	0.01
19th day	0.09
17th day	0.24
20th day	0.30
1st day	0.42
8th day	0.69
11th day	1.01
13th day	1.07
16th day	1.22
10th day	1.39
14th day	2.17



### **(c) Monte Carlo Simulation Method:**

Monte Carlo Simulation is complete method which incorporates all market variables. It is used to analyze VaR with a large number of hypothetical scenarios on the basis of measured movements. For example, with 250 days' daily return of the last calendar year used for the Historical Simulation VaR, Monte Carlo can create a countless number of possible scenarios. Each historical result for an individual variable is combined with each possible historical result combination for all other market variables. As scenarios are randomly drawn out of that large number of scenarios created by the model, the analysis is called Monte Carlo Simulation. These randomly selected scenarios are applied to the current portfolio and the Value at Risk is calculated.

### **3.1.4 Commodity Risk:**

Commodity risk refers to the uncertainties of future market values and of the size of the future income, caused by the fluctuation in the prices of commodities. It arises out of adverse movements in the world prices, exchange rates, basis between local and world prices. The risk connected with *the commodity exchange prices* is the probability of unfavorable changes in the value of commodities traded by the bank. What is more, changes in the market liquidity are often accompanied by significant price volatility. That is why the commodities' prices are in broad lines more unstable than those of most financial assets commonly traded. The risk assessment associated with commodities prices should be performed *market by market* and it should include not only analysis of historical price movements, but also assessment of the supply and demand structure on the market, so that the probability for unusually large price movements can be assessed.

A commodity enterprise needs to deal with the following kinds of risks:

- Price risk
- Quantity or volume risk
- Cost risk
- Political risk

### **3.2 Managing Market Risk:**

The Bank puts in place a set of systems and procedures appropriate to its size and complexity of its operations for identifying, measuring, monitoring and controlling market risk. The risk appetite in relation to market risk assessed keeping in view the capital of the bank as well as exposure to other risks. Once the market risk appetite is determined, the bank have to develop a strategy for market risk-taking in order to maximize returns while keeping exposure to market risk at or below the predetermined level.

### **3.3 Stress Testing:**

The risk measurement system of RAKUB supports a meaningful evaluation of the effect of stressful market conditions on the bank. Stress testing designed to provide information on the kinds of conditions under which strategies or positions would be most vulnerable and thus be tailored to the risk characteristics of the bank. The stress scenarios include:

- a) Abrupt changes in the general level of market rates
- b) Changes in the relationships among key market rates
- c) Changes in the slope and the shape of the yield curve
- d) Changes in the liquidity of key financial markets or changes in the volatility of market rates.
- e) Conditions under which key business assumptions and parameters breakdown.

In conducting stress tests, special consideration given to instruments or markets where concentrations exist as such positions more difficult to liquidate or offset in stressful situations. The bank will consider "worst case" scenarios in addition to more probable events. Management and the board of directors periodically review both the design and the results of such stress tests and ensure that appropriate contingency plans are in place.

## **Appendix-II: Liquidity Risk Management**

### **4.1 Liquidity Risk:**

Liquidity Risk is the risk that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert hard asset to cash without a loss of capital and/or income in the process. The Bank is to maintain enough liquidity required at all times and in all circumstances. The minimum criterion is to meet the commitments as and when they fall due. The possible needs of liquidity shall be measured keeping in view:

- The need to replace the net outflow of funds.
- The need to compensate for the non receipt of expected cash flows.
- The need to meet the contingent liabilities when they become due.
- The need to undertake a new transaction.

The Bank will evolve a system of collecting information pertaining to the flow of funds and the extent of mismatches and to monitor the flow of funds on a dynamic basis over a specified time frame. The likely inflows and outflows of funds from both sides of the balance sheet are to be reasonable estimated by producing a monthly cash flow analysis chart covering:

- Net inflow of deposits, after netting of maturities / premature closure of deposits.
- Net outflow of advances, after netting of expected payments / premature closure of loans
- Net outflow of investments, after netting of maturing investments / disposal of securities.
- Inter-bank obligations / claims etc.

#### **4.1.1 Liquidity Risk Indicators:**

Given below are some early warning indicators that have potential to ignite liquidity problem for a bank. Bank management needs to monitor carefully such indicators and exercise careful scrutiny wherever it deems appropriate. Examples of such internal indicators are:

- (i) A negative trend or significantly increased risk in any area or product line;
- (ii) Concentrations in either assets or liabilities;
- (iii) Deterioration in quality of credit portfolio;
- (iv) A decline in earnings performance or projections;
- (v) Rapid asset growth funded by volatile large deposit;
- (vi) A large size of off-balance sheet exposure;
- (vii) Deteriorating third party evaluation (negative rating) about the bank and negative publicity;
- (viii) Unwarranted competitive pricing that potentially stresses the banks.

Liquidity risk management involves not only analyzing banks on- and off-balance sheet positions to forecast future cash flows, but also how the funding requirement would be met. The latter involves identifying the funding market the bank has access to, understanding the nature of those markets, evaluating banks current and future use of the market and monitoring signs of confidence erosion.

#### **4.2 Liquidity Risk Management:**

Liquidity risk management is of paramount importance because a liquidity shortfall jeopardizes banking operations resulting severe reputational loss. The bank is responsible for the sound management of liquidity risk. It should establish a robust liquidity risk management framework that ensures sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources. Management should assess the adequacy of both the bank's liquidity risk

management framework and its liquidity position and should take prompt action if the bank is deficient in either area in order to protect depositors and to limit potential damage to the financial system. For a sound liquidity risk management the bank:

I) should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities and off-balance sheet items over an appropriate set of time horizons.

II) should conduct stress tests on a regular basis to identify sources of potential liquidity strain and to ensure that current exposures remain in accordance with a bank's established liquidity risk tolerance.

III) should have a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations. A CFP should outline policies to manage a range of stress environments, establish clear lines of responsibility, be regularly tested and updated to ensure that it is operationally robust.

IV) should maintain a cushion of unencumbered, high quality liquid assets to be held as insurance against a range of liquidity stress scenarios. There should be no legal, regulatory or operational impediment in using these assets to obtain funding.

#### **4.2.1 Role of Board:**

The prerequisites of an effective liquidity risk management include an informed board, capable management and staff having relevant expertise and efficient systems and procedures. It is primarily the duty of board of directors to understand the liquidity risk profile of the bank and the tools used to manage liquidity risk. The board has to ensure that the bank has necessary liquidity risk management framework and the bank is capable of dealing with uneven liquidity scenarios. The board should approve the strategy and significant policies related to the management of liquidity. Generally, the responsibilities of the board include:

- (i) providing guidance on the level of appetite for liquidity risk;

- (ii) appointing senior managers who have ability to manage liquidity risk and delegate to them the required authority to accomplish the job;
- (iii) continuously monitoring the bank's performance and overall liquidity risk profile through reviewing various reports; and
- (iv) ensuring that senior management takes the steps necessary to identify, measure, monitor and control liquidity risk.

#### **4.2.2 Role of Senior Management:**

Maintenance of sound liquidity position largely depends on the proficiency of senior management. For a robust liquidity management system, Senior Management should:

1. develop a strategy, policies and practices to manage liquidity risk in accordance with the risk tolerance and to ensure that the bank maintains sufficient liquidity.
2. review information on the bank's liquidity developments and report to the board of directors on a regular basis. Policies and practices related to the management of liquidity at least annually be reviewed and ensure that senior management manages liquidity risk effectively.
3. have a thorough understanding of the close links between funding liquidity risk and market liquidity risk, as well as how other risks, including credit, market, operational and reputation risks affect the bank's overall liquidity risk strategy.
4. monitor current trends and potential market developments that may present significant, unprecedented and complex challenges for managing liquidity risk so that they can make appropriate and timely changes to the liquidity strategy as needed.
5. report the liquidity position to the board of the bank. The board should be informed immediately of new or emerging liquidity concerns.
6. ensure that an internal inspection/audit function reviews and assesses the liquidity management program.
7. ensure that liquidity is managed and controlled within the liquidity management and funding management programs;

#### **4.2.3 Management Information System (MIS):**

The bank has to develop an effective management information system (MIS) for sound liquidity risk management to collect the required data from the respective sources, to analyze the data and for reporting it to appropriate authority for reviewing the policy of liquidity risk. Information should be readily available for day-to-day liquidity management and risk control, as well as during times of stress. Data should be appropriately consolidated, comprehensive yet succinct, focused, and available in a timely manner. Ideally, the regular reports a bank generates will enable it to monitor liquidity during a crisis; management would simply have to prepare the reports more frequently. Bank management should keep crisis monitoring in mind when developing liquidity MIS. Besides other types of information important for managing day-to-day activities and for understanding the bank's inherent liquidity risk profile should include:

- a) Asset quality and its trends
- b) Monthly basis earnings projections.
- c) Bank's general reputation in the market and the condition of the market
- d) The type of new deposits being obtained as well as its source, maturity and price to be collected, processed and reported by Treasury Division (CAD-1).
- e) Daily Liquidity Position, Interbank Lending/Borrowing Position Foreign Currency Trading and buying and selling position etc.

As far as information system is concerned, various units of the bank related to treasury activities, the treasury operation and risk management department are to be integrated. Furthermore, management should ensure proper and timely flow of in an integrated manner; however, reporting lines are kept separate to ensure independence of these functions.

#### **4.3 Liquidity Policies:**

Sound and prudent liquidity policies set out the sources and amount of liquidity required to ensure it is adequate for the continuation of operations and to meet all applicable regulatory

requirements. These policies must be supported by effective procedures to measure, achieve and maintain operating liquidity. Operating liquidity refers to the level of liquidity required to meet a bank's day-to-day cash outflow commitments. Factors influencing a bank's operating liquidity include:

- i. cash flows and the extent to which expected cash flows from maturing assets and liabilities match; and
- ii. the diversity, reliability and stability of funding sources, the ability to renew or replace deposits and the capacity to borrow.

For regulatory purposes a bank is required to hold a specific amount of assets classed as "liquid", based on its deposit liabilities. Generally, undue reliance should not be placed on these assets, or those formally pledged, for operating purposes other than as a temporary measure, as legally they may not be available for encashment if needed. In assessing the adequacy of liquidity, the bank needs to accurately and frequently measure:

- a) the term profile of current and approaching cash flows generated by assets and liabilities, both on- and off-balance sheet;
- b) the extent to which potential cash outflows are supported by cash inflows over a specified period of time, maturing or liquefiable assets, and cash on hand;
- c) the extent to which potential cash outflows may be supported by the bank's ability to borrow or to access discretionary funding sources; and
- d) the level of statutory liquidity and reserves required and to be maintained.

The bank should formulate liquidity policies, which are recommended by senior management/ALCO and approved by the board. Board should ensure that there are adequate policies to govern liquidity risk management process. The key elements of the bank's liquidity policy should include:

- i. a statement of liquidity risk appetite;
- ii. general liquidity strategy (short- and long-term), specific goals and objectives in relation to liquidity risk management, process for strategy formulation and the level within the bank it is approved;

- iii. roles and responsibilities of individuals performing liquidity risk management functions, including structural balance sheet management, pricing, marketing, contingency planning, management reporting, lines of authority and responsibility for liquidity decisions;
- iv. liquidity risk management structure for monitoring, reporting and reviewing liquidity;
- v. liquidity risk management tools for identifying, measuring, monitoring and controlling liquidity risk (including the types of liquidity limits and ratios in place and rationale for establishing limits and ratios);
- vi. mechanisms for dealing with deviations from the policy and the restrictions it imposes; and
- vii. contingency plan for handling liquidity crises.

To be effective the liquidity policy must be communicated down the line throughout the bank. It is important that the board and senior management ensure that policies are reviewed on a regular basis (at least annually) and when there are any material changes in the bank's current and prospective liquidity risk profile. Such changes could stem from internal circumstances (e.g. changes in business focus) or external circumstances (e.g. changes in economic conditions).

Reviews provide the opportunity to fine-tune the bank's liquidity policies in light of the bank's liquidity management experience and development of its business. Any significant or frequent exception to the policy is an important barometer to gauge its effectiveness and any potential impact on bank's liquidity risk profile.

#### **4.3.1 Procedures and Limits:**

The bank should establish appropriate procedures, processes and limits to implement its liquidity policies. The procedural manual should explicitly narrate the necessary operational steps and processes to execute the relevant liquidity risk controls. The manual should be periodically reviewed and updated to take into account new activities, changes in risk management approaches and systems.

#### **4.4 Liquidity Management Structure:**

The responsibility for managing the overall liquidity of the bank should be delegated to a specific, identified group within the bank. This may be in the form of an Asset Liability Committee (ALCO). Since liquidity management is a technical job requiring specialized knowledge and expertise, it is important that responsible officers not only have relevant expertise but also have a good understanding of the nature and level of liquidity risk assumed by the bank and the means to manage that risk.

It is critical that there can be close links between those individuals responsible for liquidity and those monitoring market conditions, as well as other individuals with access to critical information. This is particularly important in developing and analyzing stress scenarios.

#### **4.5 Measurement of Liquidity Risk:**

An effective liquidity risk measurement system not only helps in managing liquidity in times of crisis but also optimizes return through efficient utilization of available funds. The Bank should adopt a cash flow approach for measurement and management of liquidity risk. Under this approach, liquidity is tracked through maturity of assets and liabilities or cash flow mismatches. To ensure a robust liquidity management the bank can adopt some commonly used liquidity measurement and monitoring techniques which are discussed as under;

##### **4.5.1 Estimation of Liquidity Gaps (Maturity Ladder):**

Maturity ladder helps to detect liquidity condition of a bank. It also estimates cash inflows and out flows and thus net deficit or surplus both on a day to day basis and over a series of specified time periods. The bank requires to focus on the maturity of its assets and liability in different maturity buckets. Mismatch is accompanied by liquidity risk and excessive longer tenor lending against short term borrowing can put a bank's balance sheet in a very critical and risky position. The maturity ladder RAKUB uses is as follows:

- ✓ call bucket (overnight)
- ✓ days to 7 days

- ✓ days to 1 month
- ✓ above 1 month to 3 months
- ✓ above 3 months to 12 months
- ✓ above 1 year to 5 years
- ✓ more than 5 years

#### **4.5.2 Contingency Funding Plan:**

In order to develop comprehensive liquidity risk management framework, the bank should have in place plans to address stress scenarios. Such a plan commonly known as Contingency Funding Plan (CFP), is a set of policies and procedures that serves as a blueprint for a bank to meet its funding needs in a timely manner and at a reasonable cost.

A CFP is a projection of future cash flows and funding sources of a bank under market scenarios including aggressive asset growth or rapid liability erosion. To be effective it is important that a CFP should represent management's best estimate of balance sheet changes that may result from a liquidity or credit event. A CFP can provide a useful framework for managing liquidity risk both short term and in long term. Further it helps to ensure that a bank can prudently and efficiently manage routine and extraordinary fluctuations in liquidity.

#### **4.5.3 Ratio Analysis for Liquidity Risk Management:**

- ✓ Liquid asset to total Assets
- ✓ Term deposit to total deposit
- ✓ Volatile Liability to total liability
- ✓ Advance-Deposits ratio
- ✓ Medium Term Funding Ratio
- ✓ Investment Deposit Ratio
- ✓ Maximum Cumulative Outflow (MCO)

- ✓ Wholesale Borrowing Ratio
- ✓ Total Commitment Ratio
- ✓ Liquid assets to short term liabilities
- ✓ Borrowed Funds to total liabilities
- ✓ Liquidity Coverage Ratio
- ✓ Net Stable Funding Ratio

#### 4.5.4 Limit for Liquidity Measurement Ratios:

Sl. No.	Ratio name	Standard Limit
1.	Advance to deposit ratio	Standard limit 80.50%. Considering liquidity condition the limit can be extended 3% more with the BoDs approval.
2.	Wholesale borrowing	Total Wholesale borrowing of the bank should not exceed 80% of the total eligible capital.
3.	Maximum Cumulative Outflow (MCO)	a) MCO up to 1-month bucket should not exceed 18% of balance sheet amount. b) MCO above 1-month to 3 months bucket should not exceed 30% of balance sheet amount. c) MCO above 3-months to 1 year bucket should not exceed 35% of balance sheet amount.
4.	Medium Term Funding Ratio:	The MTF ratio of the bank should not be less than 30% but the ideal scenario should be 45%.
5.	CRR	5% daily and 5.5% bi-weekly basis.
6.	SLR	13% for conventional banking. RAKUB is exempted of maintaining SLR
7.	Cash holding Limit	10% of Demand liabilities of a branch. Compliance of RAKUB, BCD Circular letter no. 6/98 dated 22.04.1998 should be ensured in this regard.

8.	Low cost deposit to total deposit	Standard level 60%
9.	Commitment	Respectively 50%, 500% and 250% of total asset, eligible capital and HQLA. Lowest amount of these three ratios would be the standard limit.
10.	L C R	Minimum 100%
11.	NSFR	Minimum 100%

Head of Treasury (CAD-1) should be vigilant on the maintenance of the above ratios and their limits. Any breach of the ratio limits and their subsequent results would be brought under notification of senior management / ALCO.

#### **4.6 Factors Affecting Liquidity Risk:**

With a view to defending stressed liquidity condition, management should ensure action against:

- ✓ Over extension of credit
- ✓ High level of NPAs
- ✓ Poor asset quality
- ✓ Mismanagement in the dealing of fund
- ✓ Non recognition of embedded option risk
- ✓ Reliance on a few wholesale depositors
- ✓ Large undrawn loan commitments
- ✓ Lack of appropriate liquidity policy & contingent plan
- ✓ Over concentration on a specific deposit
- ✓ Over concentration on a specific loan sector

#### **4.7 Monitoring and Reporting Risk Exposures:**

Senior management and the board, or a committee thereof, should receive reports on the level and trend of the bank's liquidity risk at least quarterly. From these reports, senior management and the board should learn how much liquidity risk the bank is assuming, whether management is complying with risk limits, and whether management's strategies are consistent with the board's expressed risk appetite. The sophistication or detail of the reports should be commensurate with the complexity of the bank.

## **Appendix- III : Wholesale Borrowing Guidelines (WBG)**

### **5.0 Wholesale Borrowing:**

Wholesale Borrowing is the Bank's historic market liquidity & borrowing capacity from the whole sale market i.e. Inter-bank market. It indicates the dependence on wholesale markets for funding. Sometimes Bank raise fund from Inter-bank market but ALCO should analyze & decide of its optimum profitable use.

### **5.1 Wholesale Borrowing Guidelines:**

The bank should have a comprehensive and vivid wholesale borrowing policy and the following factors are to be considered while setting the WBG guidelines:

- The size and turnover of the local market, market share of the respective banks
- Balance sheet size of the bank
- Capital size of the bank
- Historical trend of market liquidity
- Credit rating of the bank (to understand counter party bank's limit on the concerned bank)
- Stability of liquidity and interest rates of the market

Wholesale borrowing guidelines will be set as an absolute amount bearing in mind the depth of the local market and counterparties' perceived credit appetite for the bank.

#### **5.1.1 Products:**

For local currency, the following products are available in the wholesale market-

- Call Money
- Short Notice Deposit from banks and financial institutions
- Term Deposit (Less than 12 months) from banks/FIs

- Overdrawn balance of Nostro Accounts.
- Placement
- Commercial paper or similar instruments.

### **5.1.2 Access to:**

The bank has access to Banks and Financial Institutions of the market. The bank can borrow local currency from other banks & financial Institutions.

### **5.1.3 Fund Concentration:**

- (i) **Institutional Concentration:** The bank can use the borrowing windows of both Banks and Financial Institutions. As a state owned specialized Bank, the main focus for borrowing will be the peer banks i.e. other state owned commercial banks (SOCBs) and Private Commercial Banks (PCBs) rather than the Foreign Commercial Banks (FCBs) for their limited exposure to the market.
- (ii) **Geographical Concentration:** The bank will try to borrow from local commercial banks and financial Institutions.

### **5.1.4 Capacity:**

The capacity of wholesale borrowing depends on the bank's current financial state and eligible capital.

### **5.1.5 Limit:**

Wholesale Borrowing covers call borrowing, Short Notice Deposit from banks and financial institutions, placement received with maturity less than 12 months, commercial papers/similar instruments and overdrawn Nostro-accounts or any kind of foreign currency borrowing. As a Non-primary Dealer the bank's WB Limit should be capped at

80% of its eligible capital (paid up capital in case of inadequate capital) on fortnightly average basis with maximum two deviations (maximum 90% of the capital) in a particular fortnight as per Bangladesh Bank's guidelines. Therefore, presently W B limit of the bank is set on the basis of 80% of Paid up capital of the bank amounting tk. 560.00 crore (paid up capital 700 crore) with a maximum two deviations up to 90% amounting tk. 630.00 crore in a particular fortnight.

#### **5.1.6 Role & Responsibility of Fund Manager:**

Monitor the liquidity position of the Bank and liquidity management activities undertaken by the Bank including wholesale funding activities. The bank's Head of Central Accounts Department-1 will act as Fund Manager. Fund management desk will analyze the liquidity position, historical trend, demand and forecast future trend of the market and report to the fund manager. The fund manager will evaluate the report and make decision for borrowing within the limit.

#### **5.1.7 Risk Involved:**

If the bank's total lending and investment dominates on total deposit and equity, the bank has to maintain liquidity by borrowing from the market. In that case the following risks will be involved:

- (i) **Liquidity Risk:** Liquidity risk is the risk that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert hard asset to cash without a loss of capital and/or income in the process.
- (ii) **Market Risk:** It is the possibility for the bank to experience losses due to factors that affects the overall performance of the financial market.
- (iii) **Matching Risk:** This kind of risk involves when the maturity of assets of

the bank do not match with the maturity of liabilities.

So, for the prudent liquidity management and treasury management the Fund manager would follow the WBG strictly. To keep intact the bank's interest the treasury manager should keep touch with the market and take decision promptly as per situation demand.

## **Appendix-IV: Contingency Funding Plan**

### **6.1 Contingency Funding Plan:**

A contingency funding plan (CFP) is, at its core, a liquidity crisis management instrument. Contingency Funding Plan (CFP) serves to outline the procedures that shall be followed when adverse market conditions arise that could disrupt the bank's ability to fund some or all of its needs.

A Contingency funding plan is to prepare keeping in mind that enough liquidity is available to meet the funding requirements in a liquidity crisis situation. It is a cash flow projection that forecasts funding needs and funding sources at stress situation under market scenarios including aggressive asset growth or rapid liability erosion. It is a set of policies and procedures that serves as a blueprint for the bank to meet its funding needs in a timely manner and at a reasonable cost. C F P ensures:

- ❖ Maintenance of an appropriate amount of liquid assets
- ❖ Measurement and projection of funding requirements during various scenarios
- ❖ Management of access to funding source

### **6.2 Objective of the Plan:**

The objective of CFP is to provide senior management with procedures to follow when the contingency plan is officially in effect. It aims to establish a framework for management of liquidity risk that will assure that the bank will have sufficient liquidity resources to;

- ▶ Establish an action plan with a view to managing a stressed liquidity situation in the market
- ▶ Provide a framework for an effective response to a liquidity crisis
- ▶ Meet regulatory obligations

- ▶ Meet the requests of depositors for withdrawal of their funds from the bank
- ▶ Ensure minimal disruptions in treasury operations;
- ▶ Identify and take advantage of opportunities while under the adverse or crisis conditions
- ▶ Match potential sources and uses of fund to tackle stressed condition
- ▶ Establish indicators that alert management to a predetermined level of impending risks

CFP evaluates a bank's potential balance sheet changes that may result from various liquidity or credit events. The idea is to develop specific plans that uncover early warning signals of a potential liquidity crisis.

### **6.3 Contingency Action Plan for stressed condition:**

#### **6.3.1 Scope of C F P:**

The CFP should project on the bank's funding position during both temporary and long-term liquidity changes, including those caused by liability erosion. The CFP should explicitly identify, quantify and rank all sources of funding by preference, such as:

- i. Reducing assets;
- ii. Modification or increasing liability structure;
- iii. Using other alternatives for controlling balance sheet changes.

The CFP should include asset side as well as liability side strategies to deal with liquidity crises. The asset side strategy may include; whether to liquidate surplus money market assets, when to sell liquid or longer-term assets, etc. While liability side strategies specify policies such as pricing policy for funding, A CFP also clarifies roles and responsibilities of various individuals at the time of liquidity crises and the management information system between management, ALCO, traders, and others.

### **6.3.2 Purpose of the Plan:**

C F P efforts to establish a framework for liquidity risk management that will assure sufficient liquid resources for the bank, especially in a stressed liquidity scenario. Stressed Liquidity scenario is defined as a condition that arises from a sudden deterioration of the perceived safety and credibility of the bank, resulting in substantial withdrawal of funds by depositors.

### **6.3.3 Trigger Point:**

The plan to be activated when any 5(Five) or more of the following conditions exist:

- i. Bangladesh Bank has declined to grant loan at the bank's request (i.e in stress condition)
- ii. Call money market rates have exceeded 15% for more than 15 consecutive days
- iii. Call facilities have been declined by the market
- iv. Consolidated AD ratio has exceeded the maximum limit resulting liquidity emergency for more than 15 days.
- v. Wholesale borrowing has exceeded 80% of paid up capital.
- vi. The overall economy is experiencing tight liquidity position
- vii. Low cost/no cost Deposit has fallen below 45% of Total Deposit Mix
- viii. Customers unexpectedly exercising options to withdraw deposits.
- ix. Disturbance in payment and settlement systems due to operational and local disturbance.
- x. Total commitment level has surpassed it's appropriate limit.

## **6.4 Contingency Action Plan to Manage Stressed Liquidity:**

### **6.4.1 Scope:**

To establish an action plan to manage a stressed liquidity situation created by liquidity crisis.

### **6.4.2 Contingency Management Team (CMT):**

There should be a contingency management team consisting of members from related departments of the bank. The Chairman of the team may include any other relevant personnel as deemed appropriate. The formation of such team would be as follows:

Sl. No.	Designation	Position in ALCO
1.	Deputy Managing Director	Chairman
2.	General Manager (Admin)	Member
3.	General Manager (Operation)	Member
4.	General Manager (Accounts, Audit & Recovery)	Member
5.	Head of Branches Control Department	Member
6.	Head of Loans and Advances Department-1	Member
7.	Head of Central Accounts Department-1	Member Secretary

In case of absence of the Deputy Managing Director (chairman), senior most General Manager of RAKUB head office would lead the team and chair its meetings.

### **6.4.3 Roles of the Contingency Management Team:**

The roles of the CMT is to investigate cause and magnitude of the crisis, assess steps to prevent occurrence/ escalation, understand expected duration of the crisis, assess market sentiment and decide on remedial action to mitigate effects of the crisis.

### 6.4.3.1 Phase 1 – Impending Crisis:

Details of Action Points	Action to be taken by
1. Investigate the underlying causes about the crisis to establish: <ul style="list-style-type: none"> <li>- Extend and timing of the crisis</li> <li>- Duration of the crisis</li> <li>- Remedial action to avoid the crisis, agree any external/internal communications statement etc.</li> </ul>	Head of Central Accounts Department-1
2. Advise all Divisional Heads about the crisis and cancel leave commitments of key personnel (if necessary)	Managing Director (MD)
3. Review liquid and market assets portfolio by maturity and prepare a liquidation strategy	Head of Central Accounts Department-1
4. Liquidate any long FX positions and reduce FX open position to a minimum level.	Head of Central Accounts Department-1 & Head of Foreign Exchange Department
5. Recovery of NPA to ensure a smooth fund flow	Head of Loan Recovery Department-1

#### 6.4.3.2 Phase 2 - Crisis Situation:

Details of Action Points	Action to be taken by
1. Treasury (Head of CAD-1) will call for an urgent meeting of the ALCO Chaired by the MD in order to review and discuss the situation and its impact on the Bank and assess how liquidity crisis can be resolved.	Head of Central Accounts Department-1
2. Inform Bangladesh Bank regarding crisis and proposed remedial action, if deemed necessary	Managing Director (MD)
3. Brief Head of Corporate Branches, Zonal Heads and Branch Managers	Head of Central Accounts Department-1
4. Control large loan disbursement.	Head of Loans and Advances Department-1

### 6.4.3.3 Assessment and Action:

Details	Action to be taken by
1. Assess overall Advance portfolio and recall/seek repayment from customers	Head of Loans and Advances Department-1 & Head of Loan Recovery Department-1
2. Approach BB for refinance / special/ demand loan.	Managing Director (MD)
3. Approve no early withdrawal of deposits without specific approval of higher authority.	General Manager (Operation)/Zonal Manager/Branch Manager.
4. Provide regular reports to high authority on daily liquidity status of the bank and changes therein.	Head of Central Accounts Department-1
5. Communicate with major fund suppliers in an effort to assure continued availability	Head of Central Accounts Department-1 & Head of Branches Control Department
6. Regularly monitor large deposit accounts.	Head of Central Accounts Department-1 & ALCO Members
7. Monitor and control AD Ratio	Head of Loans and Advances Department-1 & Head of Branches Control Department-1
8. Communicate with different source of deposit i.e. local government authorities for new deposits.	Zonal Heads / Branch Managers

#### 6.4.3.4 Critical Contact Information:

Sl. No.	Officials	Contact No.
01.	Managing Director (Chairman)	0247-860464
02.	Deputy Managing Director	0247-860537
03.	General Manager (Admin)	0247-860476
04.	General Manager (Accounts, Audit & Recovery)	0247-860517
05.	General Manager (Operation)	0247-860479
06.	Deputy General Manager (Central Accounts Department-1)	0247-860532
07.	Deputy General Manager (Loans and Advances Department-1)	0247-860515
08.	Head of Risk Management Unit (RMU)	0247-762181
09.	Deputy General Manager (Local Principal Office)	0247-860534
10.	Deputy General Manager (Dhaka Corporate Branch)	0247-9569408

#### 6.4.3.5 Critical Contact Information (Central Bank):

Sl. No.	Officials	Contact No.
01.	Governor	02-9530411
02.	Deputy Governor-I	02-9530475
03.	Deputy Governor-II	02-9530491
04.	Deputy Governor-III	02-9530412
05.	General Manager (BRPD)	02-9530252
06.	General Manager (FEPD)	02-9530123
07.	General Manager (DOS)	02-9530093
08.	General Manager (DMD)	02-9530450
09.	General Manager (FRTMD)	02-9530116

## 6.5 Brief Summary of Regulations and Contingency Liquidity Sources & Funding Plan:

### 6.5.1 Regulations and Contingency Liquidity Sources:

Regulation	Parameter/Formula	Liquidity Sources
Cash Reserve Ratio (CRR)	- Daily minimum 5.00% - Bi-weekly minimum 5.50%	Local currency at central bank
Statutory Liquidity Ratio (SLR)	- Minimum 13.00% for Conventional Banking - Minimum 5.50% for Islamic Banking	RAKUB is exempted of maintaining SLR.

### 6.5.2 Sources of Contingent Fund:

Details	Cost of RAKUB
Deposit:	
✚ Term Deposit	5%-9%
✚ Demand Deposit	0%-5%
Bangladesh Bank:	
✚ Balance with Bangladesh Bank	0.00%
✚ Other Securities	-
Other Sources:	
✚ Cash in Hand (LCY)	0.00%
✚ Cash in Hand (FCY)	0.00%
✚ Balance at other Bank	0.00%
✚ Receivable from Government	0.00%

## **6.6 Preparation and Review/Update of CFP:**

The contingency funding plan needs to be prepared by the Treasury Department (Central Accounts Department-1). The plan should be reviewed / updated by ALCO and approved by the BODs of the bank at least annually or more frequently.

Format- A

**Appendix-IX: Forms & Formats**  
**RajshahiKrishiUnnayan Bank**  
**Name of A D Branch.....**

**Daily F C Exchange position as on.....**

Sl	No	Net position at the beginning of the day		USD
1	A)	Cash holding	:	
	B)	Overall Position (1A)	:	
2		Spot/Cash Transaction of the day	:	
	A) i	Sales to Bangladesh Bank	:	-
	ii	Purchases from Bangladesh Bank	:	-
		Net position with Bangladesh Bank	:	-
	B) i	Sales to other Bank	:	-
	ii	Purchases from other Bank	:	-
		Net position with other Bank	:	-
	<b>C) i</b>	<b>Sales to customers</b>	:	
	ia	Against imports	:	-
	ib	Others	:	
	C) ii	<b>Purchases from Customers</b>	:	-
	ia	Against export	:	-
	iib	Others	:	
		Net Position with Customers	:	-
	D)	Net Position/Cash Transactions of the day	:	-
3		Total spot position of the day(1A+2D)	:	-
		Value in Taka		
		Total: \$0.00 X BDT 83.30 (Variable)	:	-
4		Percentage of holding in individual currency out of total currency (USD)	:	
5		Position over bought/sold (in Taka)	:	
6		Position over bought/sold (in USD)	:	

Signature

Signature

Cost of Fund and Cost of Lending Calculation Statement

(Figure in Crore)

Sources of fund	Amount of Fund	Weight Factor	Components Fund cost	Weighted Component Fund cost
<b>(A) Borrowed fund:</b>	***	****	*****	*****
(1) General Refinance	***	****	*****	*****
(2) Special Refinance	***	****	*****	*****
(3) Demand Loan	***	****	*****	*****
<b>(B) Equity Fund:</b>	***	****	*****	*****
(1) Paid up Capital	***	****	*****	*****
(2) Statutory Reserve	***	****	*****	*****
(3) General Reserve	***	****	*****	*****
<b>(C) Deposit Fund:</b>	***	****	*****	*****
(1) Current Account	***	****	*****	*****
(2) Savings Account:	***	****	*****	*****
(a) Rural savings	***	****	*****	*****
(b) Urban Savings	***	****	*****	*****
(3) Fixed Deposit Account	***	****	*****	*****
(4) SND Account	***	****	*****	*****
(5) RGPS Account	***	****	*****	*****
(6) RSS Account	***	****	*****	*****
(7) RDMS Account	***	****	*****	*****
(8) RTMS Account	***	****	*****	*****
(9) RMPS Account	***	****	*****	*****
(10) RMDS Account	***	****	*****	*****
(11) RMSS Account	***	****	*****	*****
(12) RGSS Account	***	****	*****	*****
(13) School Banking Account	***	****	*****	*****
(14) Children Marriage Savings Scheme	***	****	*****	*****
(15) Hardcore poor people saving scheme	***	****	*****	*****
(16) Other Deposits	***	****	*****	*****
(17) Other Vat, Tax & Security Deposit	***	****	*****	*****
<b>(D) Weighted Average Cost of Fund before Administrative Cost</b>				*****

$$(E) \text{ Administrative Cost} = \frac{\text{Administrative Expenses}}{\text{Total Loan and Advances}} = \frac{\text{*****}}{\text{*****}} = \text{*****}$$

$$(F) \text{ Weighted Average Cost of Fund} = D+E = \text{*****}$$

$$(G) \text{ Weighted Average Cost of} = F+1\% = \text{*****}$$

Lending

Note: (i) Cost of Equity is estimated as an Opportunity Cost in the basis of Bank Rate.

(ii) Retained Earning is not considered and the same is adjusted with cumulative loss.

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Format- C		<b>RajshahiKrishiUnnayan Bank</b> Central Accounts Department-1				<b>Confidential</b>					
<b>Daily Fund Position as on .....</b>						(Amount in Crore)					
<b>1. (a) CRR Required (5.00% of Demand &amp; Time liabilities) Daily Basis</b>						----					
<b>1. (b) CRR Required (5.50% of Demand &amp; Time liabilities) Bi Weekly Basis</b>						----					
						Opening	Closing				
2.a) Bangladesh Bank, Rajshahi						(After First Clearing.)					
Add: Credited to CH & Transfer from											
Less: Debited to CH & Transfer											
2.b) Bangladesh Bank, Rangpur											
2.c) Bangladesh Bank, Bogra											
2.d) Bangladesh Bank, Dhaka											
Add: Credited to CH & Transfer											
Less: Debited to CH & Transfer(0.43+0.00)= 0.43											
2.e) Total {2.a)+----+2.d)}											
<b>Surplus/(Shortfall) {2.e)-1.(b)}</b>											
<b>Bank's Statement (Head Office only):</b>											
Bank's Name		Type	Account Number	Interest Rate	Opening Balance	Reasons for Changes		Closing Balance			
a) Bank Name				%							
b) Bank Name.				%							
c) Bank Name .				%							
d) Bank Name				%							
<b>Total</b>											
<b>Refinance Received</b>		<b>Date: DD-MM-Year</b>		<b>Amount: 0.00</b>		<b>Due Date: DD-MM-Year</b>		<b>Period: .... Year</b>			
<b>Fixed Deposit (as Assets &amp; Liability)</b>											
Fixed Deposit (Assets)		Tk.	Maturity Date	Corporate Fixed Deposit (Liability)		Tk.	Maturity Date				
1.	Bank Name			1.	Name of Institution						
2.	Bank Name			2.	Name of Institution						
3.	Bank Name			3.	Name of Institution						
4.	Bank Name			4.	Name of Institution						
5.	Bank Name			5.	Name of Institution						
6.	Bank Name			6.	Name of Institution						
7.	Bank Name			7.	Name of Institution						
8.	Bank Name			8.	Name of Institution						
<b>Total</b>				<b>Total</b>							
<b>Rajshahi Division</b>				<b>Rangpur Division</b>							
Sl. No	Zone's Name	Fund Remitted by HO to Zone		Fund Remitted by Zone to HO		Sl. No	Zone's Name	Fund Remitted by HO to Zone		Fund Remitted by Zone to HO	
		Today	Total	Today	Total			Today	Total	Today	Total
1	Rajshahi					10	Rangpur				
2	Naogaon					11	Gaibandha				
3	Natore					12	Kurigram				
4	Nawabgonj					13	Nilphamari				
5	Bogra (N)					14	Lalmanirhat				
6	Bogra (S)					15	Dinajpur (N)				
7	Joypurhat					16	Dinajpur (S)				
8	Pabna					17	Thakurgaon				
9	Sirajgonj					18	Panchagarh				
<b>Sub Total</b>						<b>Sub Total</b>					
19.	LPO					20.	Dhaka				
<b>Total</b>						<b>Total</b>					

Net Remittance by HO to Zone = Total Fund Remitted by HO to Zone - Fund Remitted by Zone to HO

Signature

Signature

**RajshahiKrishiUmmayan Bank**  
Central Accounts Department-1  
**STATEMENT ON NET STABLE FUNDING RATIO**

Sl.	Component	tk. in thousand
1	Regulatory Capital (consolidated)	
2	Customer Deposit (excluding Financial Institution)	
a	Current (including 10% of saving)	
b	Savings (90%)	
c	Fixed (1 month or less)	
d	Fixed (more than 1 month or less than year)	
3	Deposit from financial institutions:	
a	Current	
b	Fixed (1 month or less)	
c	Fixed (more than 1 month or less than year)	
4	Liabilities with a remaining maturity of one year or more (excluding those mentioned in 2 and 3)	
5	All other monetary liabilities (excluding those mentioned in 2,3,4 above and amounts owed to financial institutions	
6	Amount owed to financial institutions	
7	Residential Mortgages, regardless of maturity, that qualify for the 50% RW under Basel II Standardized Approach	
8	Loans to non-financial client other than natural persons or small businesses with a residual maturity of less than a year	
9	other loans to non-financial clients with remaining maturity of one year or more, that qualify for the 50% RW under Basel II standardized Approach	
10	Loans to natural persons or small businesses with a residual maturity of less than a year	
	All loans (excluding those mentioned from 7 to 10) and cost price of debt securities (excluding those issued by other FIs) with a	
11	residual maturity of one year or more	
12	Cost price of debt securities (excluding those issued by other FIs) with a residual maturity of less than one year	
13	Undrawn portion of lines of credit (continuous Loans)	
14	Undrawn portion of lines of credit (Term Loans)	
15	Amounts outstanding of commercial letters of credit (settlement date within the next 30 days)	
16	Amounts outstanding of guarantees, standby letters of credit, performance bonds, bid bonds and similar instruments	
17	Debt securities, regardless of maturity, issued by other financial institutions (cost price)	
18	Fixed Assets (Cost price)	
19	Other investments:	
a	Non traded equity securities (cost price)	
b	Capital provided to own subsidiaries	
c	Publicly - Traded equity securities (cost price)	
20	Loans to, and deposits in, other financial institutions in Bangladesh	
21	Claims on Bangladesh Bank	
22	Cash in hand (Lcy+Fcy)	
23	All other assets not mentioned above	

Signature

Signature

Sl	COMPONENTS:	Amount in Thousand
1	Customer Deposit (excluding Financial Institutions):	
	Current (including 10% of savings)	
	Savings (90%)	
	Fixed (1 month or less)	
	Fixed (more than 1 month)	
2	Deposit from financial institutions:	
	Current	
	Fixed (1 month or less)	
	Fixed (more than 1 month)	
3	REPO	
4	Other borrowings and placement received	
5	All other monetary liabilities issued by the bank that do not fit into one of the above categories.	
6	Undrawn portion of lines of credit (continuous loans)	
7	Undrawn portion of lines of credit (Term loans)	
8	Amounts outstanding of commercial letters of credit (settlement date within the next 30 days).	
9	Amounts outstanding of guarantees, standby letters of credit, performance bonds, bid bonds, and similar instruments.	
10	All contractual cash outflows within the next 30 days.	
11	Loans to financial institutions, such as reverse repos, backed by assets that are considered high-liquid	
12	Loans to financial institutions backed by assets that are not considered high-liquid	
13	Principal and interest receivables, on performing Term loans, from all non-financial customers within the next 30 days	
14	Cash on hand (Lcy+Fcy)	
15	Balance with Bangladesh Bank:	
	a) Local Currency Total	
	b) Foreign Currency Total	
16	Value of unencumbered eligible GOVT. Securities in HTM portfolio (Tbill & Tbond)	
	Value of securities marked as Capital with BB	
17	Value of other unencumbered eligible GOVT. Securities in HTM portfolio	
18	Market Value of unencumbered eligible GOVT. Securities in HFT portfolio (Tbill & Tbond)	

Authorized signature:

Name &amp; Phone No.:

**RajshabikrishUmnayan Bank**  
Central Accounts Department-1  
**Structural Liquidity Profile (SLP)**

	CALL	2 - 7 Days	8 Days - 1 Month	1 - 3 months	3 - 12 months	1 - 5 years	more than 5 years	Total
<b>ASSETS (INFLOW)</b>								
Cash in hand (Lcy+Fcy)								0.00
Balance with Bangladesh Bank (Lcy)								0.00
Balance with BB (Fcy)								0.00
Balance with other banks and financial institutions								0.00
Money at call and short notice								0.00
Investment in G-SEC								0.00
Other Investment (Share, Debenture & bond, MFU and others)								0.00
Loans and Advances								0.00
Bills Purchased & discounted								0.00
Reverse Repo with Bangladesh Bank								0.00
Reverse Repo with Others								0.00
Fixed assets including premises, furniture and fixtures								0.00
Other assets								0.00
Non-banking assets								0.00
Other receivables								0.00
<b>Total Inflows</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Liabilities: (OUTFLOW)</b>								
Borrowing from Bangladesh Bank (Refinances, etc.)								0.00
REPO/LS with Bangladesh Bank								0.00
REPO with other banks & Fis								0.00
Borrowing from other Banks & Fis								0.00
Money at call and short notice								0.00
Demand Deposits								0.00
Savings bank deposit								0.00
Fixed Deposit								0.00
Bills payable								0.00
Provision and other liabilities								0.00
Capital & Reserve								0.00
<b>Total Outflows</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Letter of Credit/Guarantees (Net of margin)								0.00
Other OBS Items (Net of margin)								0.00
Available Balance with BB (Fcy)								0.00
Net Nostro a/c balance								0.00
<b>NET MISMATCH</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>CUMULATIVE NET MISMATCH</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Medium Term Funding Ratio (MTFR):

#DIV/0!

Maximum Cumulative Outflow (MCO):

#DIV/0!

Trends:	CALL	2 - 7 Days	8 Days - 1 Month	1 - 3 months	3 - 12 months	1 - 5 years
Demand Deposits withdrawal						
Savings bank deposit withdrawal						
Letter of Credit/Guarantees (non funded to funded)						
Other OBS Items (non funded to funded)						

# MTF = (Total Liabilities one year and above)/(Total Assets one year and above)

# MCO = (Total outflows upto one month and Total OBS upto one month)/(Total Inflows+Total Nostro a/c balance (Net)+ Total available fcy with BB)

Format- G

**RajshahiKrishiUmmyan Bank**  
 Central Accounts Department-I  
 Statement on Wholesale Borrowing

NAME OF THE BANK	Rajshahi Krishi Ummyan Bank
DATE OF SUBMISSION (mm/dd/yy)	

(Figure in Thousand)

SL	DATE (mm/dd/yy)	CALL BORROWING	FIRST FORNIGHT					OVERDRAWN BALANCE OF NOSTRO ACCOUNTS	*TOTAL AMOUNT OF WHOLESALE BORROWING 7=(1+2+3+4+5+6)	ELIGIBLE CAPITAL OF THE BANK	RATIO 9=(7/8)
			DEPOSIT AND PLACEMENT RECEIVED (Maturity less than 12 Months) DEPOSIT		PLACEMENT						
		1	BANK	FIs	BANK	FIs	6		8		
1								0		0.00%	
2								0		0.00%	
3								0		0.00%	
4								0		0.00%	
5								0		0.00%	
6								0		0.00%	
7								0		0.00%	
8								0		0.00%	
9								0		0.00%	
10								0		0.00%	
11								0		0.00%	
12								0		0.00%	
13								0		0.00%	
14								0		0.00%	
15								0		0.00%	
<b>FORTNIGHTLY AVERAGE</b>											

SECOND FORNIGHT										
SL	DATE (mm/dd/yy)	CALL BORROWING	BANK	FIs	BANK	FIs	OVERDRAWN BALANCE OF NOSTRO ACCOUNTS	*TOTAL AMOUNT OF WHOLESALE BORROWING 7=(1+2+3+4+5+6)	ELIGIBLE CAPITAL OF THE BANK	RATIO 9=(7/8)
16								0		0.00%
17								0		0.00%
18								0		0.00%
19								0		0.00%
20								0		0.00%
21								0		0.00%
22								0		0.00%
23								0		0.00%
24								0		0.00%
25								0		0.00%
26								0		0.00%
27								0		0.00%
<b>FORTNIGHTLY AVERAGE</b>										

Signature

Signature

NAME OF THE BANK		Rajshahi Krishi Unnayan Bank														(Figure in Thousand)	
DATE OF SUBMISSION(mm/dd/yyyy)		05 March 2018															
Sl	DATE (mm/dd/yyyy)	Calculation of Commitment Limit														16 = Lowest of 11, 13 and 15	
		1	2	3	4	5	6	7	8	9-(1+2+3+5+7)-(4+8)	10	11	12	13	14		15
		UNDRAWN PORTION OF CONTINUOUS LOAN INCLUDING INTEREST	UNDRAWN PORTION OF TERM LOAN	OUTSTANDING IRREVOCABLE L/C & SIMILAR INSTRUMENTS	DEDUCTIBLE AMOUNT	LETTERS OF GUARANTEE	DEDUCTIBLE AMOUNT	ACCEPTANCES AND SIMILAR INSTRUMENTS	DEDUCTIBLE AMOUNT	TOTAL COMMITMENT	TOTAL ASSETS OF THE BANK	Acceptable amount of Commitment set by ALCO	TOTAL ELIGIBLE CAPITAL OF THE BANK	Acceptable amount of Commitment set by ALCO	TOTAL HIGH QUALITY LIQUID ASSETS (HQLA) OF THE BANK	Acceptable amount of Commitment set by ALCO	Commitment Limit
1										0							0
2										0							0
3										0							0
4										0							0
5										0							0
6										0							0
7										0							0
8										0							0
9										0							0
10										0							0
11										0							0
12										0							0
13										0							0
14										0							0
15										0							0
16										0							0
17										0							0
18										0							0
19										0							0
20										0							0
21										0							0
22										0							0
23										0							0
24										0							0
25										0							0
26										0							0
27										0							0

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Amount in BDT

Particulars	Maturity Period					Total
	Up to 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Above 5 years	
<b>Assets</b>						
Cash in hand (including Bangladesh Bank)						
Balance with other banks and financial institutions						
Money at call and on short notice						
Investment						
Loans and advances						
Fixed assets including premises, furniture and fixture						
Other assets						
Non-banking assets						
<b>Total assets</b>	-	-	-	-	-	-
<b>Liabilities</b>						
Borrowing from other banks, financial institutions and agents						
Deposits and other accounts						
Other liabilities						
<b>Total liabilities</b>	-	-	-	-	-	-
<b>Net liquidity</b>	-	-	-	-	-	-

SignatureSignature

Format- J

**Rajshahi Krishi Unnayan Bank**

Contingent Fund Flow Forecasting  
(for Branches/Zonal Offices)

<b>Fund Inflow</b>	<b>Amount in Lac</b>
1. Cash in :	****
(i) Cash in hand	****
(ii) Balance at Other Bank	****
2. Loan Recovery	****
3. Deposit Collection	****
4. Interest Income (Loan+ Deposit to Bank)	****
5. Bills Receivable	****
6. Other Receivable	****
<b>(a) Total Inflow (1+2+3+4+5+6)</b>	****
<b>Fund Outflow</b>	****
7. Loan Disbursement:	****
i) Agri.	****
ii) Non-Agri.	****
8. Operational Expenses	****
9. Interest Expenses	****
10. Allowance Payable	****
11. Deposit Repayment	****
12. Bills payable	****
13. Other Payable	****
<b>(b) Total Outflow (7+8+9+10+11+12+13)</b>	****
<b>(c) Fund Surplus/ Shortfall</b>	****
<b>(d) Closing Balance:</b>	****
(i) Cash in hand	****
(ii) Balance at Other Bank	****

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Format- K

Calculation of Weighted Average Interest Rate on Advance (WAIRA)

As on..... Amount in Crore

Sl. No.	Details of Advance	Total Balance	Interest Rate	C*D
A	B	C	D	E
1.	Crops	****	***	***
2.	Live stock	****	***	***
3.	Goat-Rams/Mixed Farming	****	***	***
4.	Fisheries	****	***	***
5.	Irrigation equipment and machinery	****	***	***
6.	Agro-based industries	****	***	***
7.	Cash credit	****	***	***
8.	working capital	****	***	***
9.	SME	****	***	***
10.	Shawnirvor	****	***	***
11.	UNCDF, MSFSCIP, UDP, RSCP	****	***	***
12.	Other socio-economic activities	****	***	***
13.	Nurshary-fruits mixed farming	****	***	***
14.	Loan against FDR	****	***	***
15.	Loan against DPS	****	***	***
16.	Loan against RPS	****	***	***
17.	Loan against RGPS	****	***	***
18.	Loan against RMSS	****	***	***
19.	Other	****	***	***
20.	Staff Loan	****	***	***
<b>Total</b>		<b>****</b>	<b>***</b>	<b>***</b>

Calculation of Weighted Average Interest Rate on Deposit (WAIRD)

As on..... Amount in Crore

Sl. No.	Details of Deposits	Total Balance	Interest Rate	H*I
F	G	H	I	J
1.	Current Accounts	****	****	****
2.	SND	****	****	****
3.	Savings Accounts	****	****	****
a.	Rural Areas	****	****	****
b.	Urban Areas	****	****	****
4.	Fixed Deposit	****	****	****
5.	DPS	****	****	****
6.	RGPS	****	****	****
7.	Education Savings Scheme	****	****	****
8.	Children Marriage Savings Scheme	****	****	****
9.	Hazz Savings Scheme	****	****	****
10.	RSS	****	****	****
11.	Teachers Savings Scheme	****	****	****
12.	Small Savings Scheme	****	****	****
13.	Savings scheme for hardcore poor people	****	****	****
14.	KSS	****	****	****
15.	RDMS	****	****	****
16.	RDP	****	****	****
17.	School Banking	****	****	****
18.	RMPS	****	****	****
19.	RTMS	****	****	****
20.	RMDS	****	****	****
21.	RMSS	****	****	****
22.	10 Taka Farmer Account	****	****	****
23.	RGSS	****	****	****
24.	Others (Vat, Tax, Security Deposit, RPS)	****	****	****
<b>Total</b>		<b>****</b>	<b>****</b>	<b>****</b>

$$WAIRA = E / C * 100$$

$$\text{Rate of Interest Spread} = WAIRA - WAIRD$$

$$WAIRD = J / H * 100$$

$$\text{Net Spread} = \text{Rate of Administrative Cost} - \text{Rate of Interest Spread}$$

Format- L

**Rajshahi Krishi Unnayan Bank**  
**Central Accounts Department-1**  
**Contingent Fund Flow Forecasting**  
**(for Treasury Division/CAD-1)**

Fund Inflow		Fund Outflow	
1. Cash in Hand (Branches)		1. Loan Disbursement (Branches)	
2. Balance at SND A/C (Head Office)		2. Loan Disbursement (Head Office)	
3. Balance at SND A/C (Branches)		3. Fund Remitted to Branches (for DL)	
4. Balance at CD A/C (Branches)		4. Repayment of NCDP Loan	
5. Balance at FDR A/C (Head Office)		5. Repayment of BB Blocked Loan Installment.	
6. Loan Recovery		6. Deposit Withdrawal/Payment	
7. Deposit Collection		7. Vat / Tax / Excise Duty	
8. Refinance for NCDP		8. Superannuation / Leave Encashment	
9. Fund Remitted from Branches		9. Aged/Widow/Disabled People Allowance	
10. Govt. Allowances (for aged/widow/ disabled People)		10. Fund for Dhaka Corporate Branch	
11. Recapitalization by Govt.		11. Corporate Deposit Payment	
		12. Salary / Allowances	
		13. Staff Loan	
		14. Balance at FDR A/C (Head Office)	
		15. Balance at SND A/C (Head Office)	
		16. Balance at SND A/C (Branches)	
		17. Balance at CD A/C (Branches)	

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Format-M

**RajshahiKrishiUnnayan Bank**  
**Central Accounts Department-1**

Statement on Call Loan Borrowing from Other Banks/Financial Institutions.

(Amount in crore)

Sl. No.	Name of Institution	(Date)		(Date)		(Date)	
		Amount	Rate	Amount	Rate	Amount	Rate
Total Weighted Average%							
Minimum%							
Maximum%							
Total Cost							

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**THE END**