

Asset - Liability Management (ALM) System

February 10, 1999

BP.BC. 8/21.04.098/99

To
All Scheduled Commercial Banks
(excluding RRBs)

Dear Sir,

Asset - Liability Management (ALM) System

Please refer to our circular DBOD No. BP. BC. 94/ 21. 04. 098/ 98 dated September 10, 1998 forwarding therewith draft Guidelines for putting in place Asset-Liability Management (ALM) System in banks. The draft Guidelines have been reviewed by us in the light of the issues raised/suggestions made by banks in the seminars held at Bankers Training College and also at the Review Meeting of the Chairmen/Chief Executive Officers of banks. The final Guidelines revised on the basis of the feedback received from banks are enclosed, for implementation by banks, effective **April 1, 1999**. In this connection, we have to advise as under:

2. Banks should give adequate attention to putting in place an effective ALM System. Banks should set up an internal Asset-Liability Committee (ALCO), headed by the CEO/CMD or the ED. The Management Committee or any specific Committee of the Board should oversee the implementation of the system and review its functioning periodically.

3. Keeping in view the level of computerisation and the current MIS in banks, adoption of a **uniform ALM System** for all banks may not be feasible. The final guidelines have been formulated to serve as a benchmark for those banks which lack a formal ALM System. Banks which have already adopted more sophisticated systems may continue their existing systems but they should ensure to fine-tune their current information and reporting system so as to be in line with the ALM System suggested in the Guidelines. Other banks should examine their existing MIS and arrange to have an information system to meet the prescriptions of the new ALM System. To begin with, banks should ensure coverage of **at least 60%** of their liabilities and assets. As for the remaining 40% of their assets and liabilities, banks may include the position based on their estimates. It is necessary that banks set targets in the interim, for covering 100 per cent of their business by **April 1, 2000**. The MIS would need to ensure that such minimum information/data consistent in quality and coverage is captured and once the ALM System stabilises and banks gain experience, they must be in a position to switch over to more sophisticated techniques like Duration Gap Analysis, Simulation and Value at Risk for interest rate risk management.

4. In order to capture the maturity structure of the cash inflows and outflows, the Statement of Structural Liquidity (Annexure-I) should be prepared, to start with, as on the last reporting Friday of March/June/ September/December and put up to ALCO/Top Management within a month from the close of the last reporting Friday. It is the intention to make the reporting system on a fortnightly basis by **April 1, 2000**. The Statement of Structural Liquidity should be placed before the bank's Board in the next meeting. It would also be necessary to take into account the rupee inflows and outflows on account of previously contracted forex transactions (swaps, forwards, etc). Tolerance levels for various maturities may be fixed by the bank's Top

Management depending on the bank's asset - liability profile, extent of stable deposit base, the nature of cash flows, etc. In respect of mismatches in cash flows for the 1-14 days bucket and 15-28 days bucket, it should be the endeavour of the bank's management to keep the cash flow mismatches at the minimum levels. To start with, the mismatches (**negative gap**) during 1-14 days and 15-28 days in normal course may not exceed 20% each of the cash outflows during these time buckets. If a bank in view of its structural mismatches needs higher limit, it could operate with higher limit with the approval of its Board/Management Committee, giving specific reasons on the need for such higher limit. **The objective of RBI is to enforce the tolerance levels strictly by April 1, 2000.**

5. In order to enable the banks to monitor their liquidity on a dynamic basis over a time horizon spanning from 1-90 days, an indicative format (Annexure III) is enclosed. The statement of Short-term Dynamic Liquidity should be prepared as on each reporting Friday and put up to the ALCO/Top Management within 2/3 days from the close of the reporting Friday.

6. We advise that in the Statement of Interest Rate Sensitivity (Annexure - II) only rupee assets, liabilities and off-balance sheet positions should be reported. The statement should be prepared as on the last reporting Friday of March/June/September/December and submitted to the ALCO / Top Management within a month from the last reporting Friday. It should also be placed before the bank's Board in the next meeting. The banks are expected to move over to monthly reporting system by **April 1, 2000**. The information collected in the statement would provide useful feedback on the interest rate risk faced by the bank and the Top Management/Board would have to formulate corrective measures and devise suitable strategies wherever needed.

7. The guidelines for ALM cover the banks' operations in **domestic currency**. In regard to foreign currency risk, banks should follow the instructions contained in Circular AD (MA Series) No.52 dated December 27, 1997 issued by the Exchange Control Department.

8. As regards furnishing of data to RBI, a separate communication will follow from the Department of Banking Supervision.

9. This circular may please be placed before the Board of Directors at its next meeting

10. Please acknowledge receipt.

Yours faithfully,

(A . Ghosh)
Chief General Manager

Encl: As above

Asset - Liability Management (ALM) System in banks - Guidelines

In the normal course, banks are exposed to credit and market risks in view of the asset-liability transformation. With liberalisation in Indian financial markets over the last few years and growing integration of domestic markets and with external markets, the risks associated with

banks' operations have become complex and large, requiring strategic management. Banks are now operating in a fairly deregulated environment and are required to determine on their own, interest rates on deposits and advance in both domestic and foreign currencies on a dynamic basis. The interest rates on banks' investments in government and other securities are also now market related. Intense competition for business involving both the assets and liabilities, together with increasing volatility in the domestic interest rates as well as foreign exchange rates, has brought pressure on the management of banks to maintain a good balance among spreads, profitability and long-term viability. Imprudent liquidity management can put banks' earnings and reputation at great risk. These pressures call for structured and comprehensive measures and not just *ad hoc* action. The Management of banks has to base their business decisions on a dynamic and integrated risk management system and process, driven by corporate strategy. Banks are exposed to several major risks in the course of their business - credit risk, interest rate risk, foreign exchange risk, equity / commodity price risk , liquidity risk and operational risk. It is, therefore, important that banks introduce effective risk management systems that address the issues related to interest rate, currency and liquidity risks.

Banks need to address these risks in a structured manner by upgrading their risk management and adopting more comprehensive Asset-Liability Management (ALM) practices than has been done hitherto. ALM, among other functions, is also concerned with risk management and provides a comprehensive and dynamic framework for measuring, monitoring and managing liquidity, interest rate, foreign exchange and equity and commodity price risks of a bank that needs to be closely integrated with the banks' business strategy. It involves assessment of various types of risks and altering the asset-liability portfolio in a dynamic way in order to manage risks.

2. This note lays down broad guidelines in respect of interest rate and liquidity risks management systems in banks which form part of the Asset-Liability Management (ALM) function. The initial focus of the ALM function would be to enforce the risk management discipline viz. managing business after assessing the risks involved. The objective of good risk management systems should be that these systems will evolve into a strategic tool for bank management.

3. The ALM process rests on three pillars:

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

4. ALM Information Systems

ALM has to be supported by a management philosophy which clearly specifies the risk policies and tolerance limits. This framework needs to be built on sound methodology with necessary

information system as back up. Thus, information is the key to the ALM process. It is, however, recognised that varied business profiles of banks in the public and private sector as well as those of foreign banks do not make the adoption of a **uniform ALM System** for all banks feasible. There are various methods prevalent world-wide for measuring risks. These range from the simple Gap Statement to extremely sophisticated and data intensive Risk Adjusted Profitability Measurement methods. However, the central element for the entire ALM exercise is the availability of adequate and accurate information with expedience and the existing systems in many Indian banks do not generate information in the manner required for ALM. Collecting accurate data in a timely manner will be the biggest challenge before the banks, particularly those having wide network of branches but lacking full scale computerisation. However, the introduction of base information system for risk measurement and monitoring has to be addressed urgently. As banks are aware, internationally, regulators have prescribed or are in the process of prescribing capital adequacy for market risks. A pre-requisite for this is that banks must have in place an efficient information system.

Considering the large network of branches and the lack of (an adequate) support system to collect information required for ALM which analyses information on the basis of residual maturity and behavioural pattern, it will take time for banks in the present state to get the requisite information. The problem of ALM needs to be addressed by following an ABC approach i.e. analysing the behaviour of asset and liability products in the sample branches accounting for significant business and then making rational assumptions about the way in which assets and liabilities would behave in other branches. In respect of foreign exchange, investment portfolio and money market operations, in view of the centralised nature of the functions, it would be much easier to collect reliable information. The data and assumptions can then be refined over time as the bank management gain experience of conducting business within an ALM framework. The spread of computerisation will also help banks in accessing data.

5. ALM Organisation

5.1 a) Successful implementation of the risk management process would require strong commitment on the part of the senior management in the bank, to integrate basic operations and strategic decision making with risk management. The Board should have overall responsibility for management of risks and should decide the risk management policy of the bank and set limits for liquidity, interest rate, foreign exchange and equity price risks.

b) The Asset - Liability Committee (ALCO) consisting of the bank's senior management including CEO should be responsible for ensuring adherence to the limits set by the Board as well as for deciding the business strategy of the bank (on the assets and liabilities sides) in line with the bank's budget and decided risk management objectives.

c) The ALM Support Groups consisting of operating staff should be responsible for analysing, monitoring and reporting the risk profiles to the ALCO. The staff should also prepare forecasts (simulations) showing the effects of various possible changes in market conditions related to the balance sheet and recommend the action needed to adhere to bank's internal limits.

5.2 The ALCO is a decision making unit responsible for balance sheet planning from risk - return perspective including the strategic management of interest rate and liquidity risks. Each bank will have to decide on the role of its ALCO, its responsibility as also the decisions to be taken by it. The business and risk management strategy of the bank should ensure that the bank

operates within the limits / parameters set by the Board. The business issues that an ALCO would consider, inter alia, will include product pricing for both deposits and advances, desired maturity profile and mix of the incremental assets and liabilities, etc. In addition to monitoring the risk levels of the bank, the ALCO should review the results of and progress in implementation of the decisions made in the previous meetings. The ALCO would also articulate the current interest rate view of the bank and base its decisions for future business strategy on this view. In respect of the funding policy, for instance, its responsibility would be to decide on source and mix of liabilities or sale of assets. Towards this end, it will have to develop a view on future direction of interest rate movements and decide on funding mixes between fixed *vs* floating rate funds, wholesale *vs* retail deposits, money market *vs* capital market funding, domestic *vs* foreign currency funding, etc. Individual banks will have to decide the frequency for holding their ALCO meetings.

5.3 Composition of ALCO

The size (number of members) of ALCO would depend on the size of each institution, business mix and organisational complexity. To ensure commitment of the Top Management and timely response to market dynamics, the CEO/CMD or the ED should head the Committee. The Chiefs of Investment, Credit, Resources Management or Planning, Funds Management / Treasury (forex and domestic), International Banking and Economic Research can be members of the Committee. In addition, the Head of the Technology Division should also be an invitee for building up of MIS and related computerisation. Some banks may even have Sub-committees and Support Groups.

5.4 Committee of Directors

The Management Committee of the Board or any other Specific Committee constituted by the Board should oversee the implementation of the system and review its functioning periodically.

5.5 ALM Process:

The scope of ALM function can be described as follows:

- Liquidity risk management
- Management of market risks
- Trading risk management
- Funding and capital planning
- Profit planning and growth projection

The guidelines given in this note mainly address Liquidity and Interest Rate risks.

6. Liquidity Risk Management

6.1 Measuring and managing liquidity needs are vital for effective operation of commercial banks. By assuring a bank's ability to meet its liabilities as they become due, liquidity management can reduce the probability of an adverse situation developing. The importance of liquidity transcends individual institutions, as liquidity shortfall in one institution can have repercussions on the entire system. Banks management should measure not only the liquidity positions of banks on an ongoing basis but also examine how liquidity requirements are likely to evolve under different assumptions. Experience shows that assets commonly considered as liquid

like Government securities and other money market instruments could also become illiquid when the market and players are unidirectional. Therefore liquidity has to be tracked through maturity or cash flow mismatches. For measuring and managing net funding requirements, the use of a maturity ladder and calculation of cumulative surplus or deficit of funds at selected maturity dates is adopted as a standard tool. The format of the Statement of Structural Liquidity is given in Annexure I.

6.2 The Maturity Profile as given in Appendix I could be used for measuring the future cash flows of banks in different time buckets. The time buckets, given the Statutory Reserve cycle of 14 days may be distributed as under:

- i) 1 to 14 days
- ii) 15 to 28 days
- iii) 29 days and upto 3 months
- iv) Over 3 months and upto 6 months
- v) Over 6 months and upto 1 year
- vi) Over 1 year and upto 3 years
- vii) Over 3 years and upto 5 years
- viii) Over 5 years

6.3 The investments in SLR securities and other investments are assumed as illiquid due to lack of depth in the secondary market and are therefore required to be shown under respective maturity buckets, corresponding to the residual maturity. However, some of the banks may be maintaining securities in the 'Trading Book', which are kept distinct from other investments made for complying with the Statutory Reserve requirements and for retaining relationship with customers. Securities held in the 'Trading Book' are subject to certain preconditions like :

- i) The composition and volume are clearly defined;
- ii) Maximum maturity/duration of the portfolio is restricted;
- iii) The holding period not to exceed 90 days;
- iv) Cut-loss limit prescribed;
- v) Defeasance periods (product-wise) i.e. time taken to liquidate the position on the basis of liquidity in the secondary market are prescribed;
- vi) Marking to market on a daily/weekly basis and the revaluation gain/loss charged to the profit and loss account; etc.

Banks which maintain such 'Trading Books' and complying with the above standards are permitted to show the trading securities under 1-14 days, 15-28 days and 29-90 days buckets on the basis of the defeasance periods. The Board/ALCO of the banks should approve the volume, composition, holding/defeasance period, cut loss, etc. of the 'Trading Book' and copy of the policy note thereon should be forwarded to the Department of Banking Supervision, RBI.

6.4 Within each time bucket there could be mismatches depending on cash inflows and outflows. While the mismatches upto one year would be relevant since these provide early warning signals of impending liquidity problems, the main focus should be on the short-term mismatches viz., 1-14 days and 15-28 days. Banks, however, are expected to monitor their cumulative mismatches (running total) across all time buckets by establishing internal prudential limits with the approval of the Board / Management Committee. The mismatches (**negative gap**) during 1-14 days and 15-28 days in normal course may not exceed 20% of the cash outflows in each time bucket. If a

bank in view of its current asset -liability profile and the consequential structural mismatches needs higher tolerance level, it could operate with higher limit sanctioned by its Board / Management Committee giving specific reasons on the need for such higher limit. The discretion to allow a higher tolerance level is intended for a temporary period, i.e. till **March 31, 2000**.

6.5 The Statement of Structural Liquidity (Annexure I) may be prepared by placing all cash inflows and outflows in the maturity ladder according to the expected timing of cash flows. A maturing liability will be a cash outflow while a maturing asset will be a cash inflow. It would also be necessary to take into account the rupee inflows and outflows on account of forex operations. While determining the likely cash inflows / outflows, banks have to make a number of assumptions according to their asset - liability profiles. For instance, Indian banks with large branch network can (on the stability of their deposit base as most deposits are rolled-over) afford to have larger tolerance levels in mismatches in the long-term if their term deposit base is quite high. While determining the tolerance levels the banks may take into account all relevant factors based on their asset-liability base, nature of business, future strategy, etc. The RBI is interested in ensuring that the tolerance levels are determined keeping all necessary factors in view and further refined with experience gained in Liquidity Management.

6.6 In order to enable the banks to monitor their short-term liquidity on a dynamic basis over a time horizon spanning from 1-90 days, banks may estimate their short-term liquidity profiles on the basis of business projections and other commitments for planning purposes. An indicative format (Annexure III) for estimating Short-term Dynamic Liquidity is enclosed.

7. Currency Risk

7.1 Floating exchange rate arrangement has brought in its wake pronounced volatility adding a new dimension to the risk profile of banks' balance sheets. The increased capital flows across free economies following deregulation have contributed to increase in the volume of transactions. Large cross border flows together with the volatility has rendered the banks' balance sheets vulnerable to exchange rate movements.

7.2 Dealing in different currencies brings opportunities as also risks. If the liabilities in one currency exceed the level of assets in the same currency, then the currency mismatch can add value or erode value depending upon the currency movements. The simplest way to avoid currency risk is to ensure that mismatches, if any, are reduced to zero or near zero. Banks undertake operations in foreign exchange like accepting deposits, making loans and advances and quoting prices for foreign exchange transactions. Irrespective of the strategies adopted, it may not be possible to eliminate currency mismatches altogether. Besides, some of the institutions may take proprietary trading positions as a conscious business strategy.

7.3 Managing Currency Risk is one more dimension of Asset- Liability Management. Mismatched currency position besides exposing the balance sheet to movements in exchange rate also exposes it to country risk and settlement risk. Ever since the RBI (Exchange Control Department) introduced the concept of end of the day near square position in 1978, banks have been setting up overnight limits and selectively undertaking active day time trading. Following the introduction of "Guidelines for Internal Control over Foreign Exchange Business" in 1981, maturity mismatches (gaps) are also subject to control. Following the recommendations of Expert Group on Foreign Exchange Markets in India (Sodhani Committee) the calculation of exchange position has been redefined and banks have been given the discretion to set up

overnight limits linked to maintenance of capital to Risk-Weighted Assets Ratio of 8% of open position limit.

7.4 Presently, the banks are also free to set gap limits with RBI's approval but are required to adopt Value at Risk (VaR) approach to measure the risk associated with forward exposures. Thus the open position limits together with the gap limits form the risk management approach to forex operations. For monitoring such risks banks should follow the instructions contained in Circular A.D (M. A. Series) No.52 dated December 27, 1997 issued by the Exchange Control Department.

8. Interest Rate Risk (IRR)

8.1 The phased deregulation of interest rates and the operational flexibility given to banks in pricing most of the assets and liabilities imply the need for the banking system to hedge the Interest Rate Risk. Interest rate risk is the risk where changes in market interest rates might adversely affect a bank's financial condition. The changes in interest rates affect banks in a larger way. The immediate impact of changes in interest rates is on bank's earnings (i.e. reported profits) by changing its Net Interest Income (NII). A long-term impact of changing interest rates is on bank's Market Value of Equity (MVE) or Net Worth as the economic value of bank's assets, liabilities and off-balance sheet positions get affected due to variation in market interest rates. The interest rate risk when viewed from these two perspectives is known as 'earnings perspective' and 'economic value' perspective, respectively. The risk from the earnings perspective can be measured as changes in the Net Interest Income (NII) or Net Interest Margin (NIM). There are many analytical techniques for measurement and management of Interest Rate Risk. In the context of poor MIS, slow pace of computerisation in banks and the absence of total deregulation, the traditional Gap analysis is considered as a suitable method to measure the Interest Rate Risk in the first place. It is the intention of RBI to move over to the modern techniques of Interest Rate Risk measurement like Duration Gap Analysis, Simulation and Value at Risk over time when banks acquire sufficient expertise and sophistication in acquiring and handling MIS.

The Gap or Mismatch risk can be measured by calculating Gaps over different time intervals as at a given date. Gap analysis measures mismatches between rate sensitive liabilities and rate sensitive assets (including off-balance sheet positions). An asset or liability is normally classified as rate sensitive if:

- i) within the time interval under consideration, there is a cash flow;
- ii) the interest rate resets/reprices contractually during the interval;
- iii) RBI changes the interest rates (i.e. interest rates on Savings Bank Deposits, DRI advances, Export credit, Refinance, CRR balance, etc.) in cases where interest rates are administered ; and
- iv) it is contractually pre-payable or withdrawal before the stated maturities.

8.2 The Gap Report should be generated by grouping rate sensitive liabilities, assets and off-balance sheet positions into time buckets according to residual maturity or next repricing period, whichever is earlier. The difficult task in Gap analysis is determining rate sensitivity. All investments, advances, deposits, borrowings, purchased funds, etc. that mature/reprice within a specified timeframe are interest rate sensitive. Similarly, any principal repayment of loan is also rate sensitive if the bank expects to receive it within the time horizon. This includes final

principal payment and interim instalments. Certain assets and liabilities receive/pay rates that vary with a reference rate. These assets and liabilities are repriced at pre-determined intervals and are rate sensitive at the time of repricing. While the interest rates on term deposits are fixed during their currency, the advances portfolio of the banking system is basically floating. The interest rates on advances could be repriced any number of occasions, corresponding to the changes in PLR.

The Gaps may be identified in the following time buckets:

- i) 1-28 days
- ii) 29 days and upto 3 months
- iii) Over 3 months and upto 6 months
- iv) Over 6 months and upto 1 year
- v) Over 1 year and upto 3 years
- vi) Over 3 years and upto 5 years
- vii) Over 5 years
- viii) Non-sensitive

The various items of rate sensitive assets and liabilities and off-balance sheet items may be classified as explained in Appendix - II and the Reporting Format for interest rate sensitive assets and liabilities is given in Annexure II.

8.3 The Gap is the difference between Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL) for each time bucket. The positive Gap indicates that it has more RSAs than RSLs whereas the negative Gap indicates that it has more RSLs. The Gap reports indicate whether the institution is in a position to benefit from rising interest rates by having a positive Gap ($RSA > RSL$) or whether it is in a position to benefit from declining interest rates by a negative Gap ($RSL > RSA$). The Gap can, therefore, be used as a measure of interest rate sensitivity.

8.4 Each bank should set prudential limits on individual Gaps with the approval of the Board/Management Committee. The prudential limits should have a bearing on the **Total Assets, Earning Assets or Equity**. The banks may work out Earnings at Risk (EaR) or Net Interest Margin (NIM) based on their views on interest rate movements and fix a prudent level with the approval of the Board/Management Committee.

8.5 RBI will also introduce capital adequacy for market risks in due course.

9. General

9.1 The classification of various components of assets and liabilities into different time buckets for preparation of Gap reports (Liquidity and Interest Rate Sensitivity) as indicated in Appendices I & II is the **benchmark**. Banks which are better equipped to reasonably estimate the behavioural pattern, embedded options, rolls-in and rolls-out, etc of various components of assets and liabilities on the basis of past data / empirical studies could classify them in the appropriate time buckets, subject to approval from the ALCO / Board. A copy of the note approved by the ALCO / Board may be sent to the Department of Banking Supervision.

9.2 The present framework does not capture the impact of embedded options, i.e. the customers exercising their options (premature closure of deposits and prepayment of loans and advances) on the liquidity and interest rate risks profile of banks. The magnitude of embedded option risk at times of volatility in market interest rates is quite substantial. Banks should therefore evolve suitable mechanism, supported by empirical studies and behavioural analysis to estimate the future behaviour of assets, liabilities and off-balance sheet items to changes in market variables and estimate the embedded options.

9.3 A scientifically evolved internal transfer pricing model by assigning values on the basis of current market rates to funds provided and funds used is an important component for effective implementation of ALM System. The transfer price mechanism can enhance the management of margin i.e. lending or credit spread, the funding or liability spread and mismatch spread. It also helps centralising interest rate risk at one place which facilitate effective control and management of interest rate risk. A well defined transfer pricing system also provide a rational framework for pricing of assets and liabilities.

APPENDIX – I

Maturity Profile – Liquidity

Heads of Accounts

Classification into time buckets

A. Outflows

1. Capital, Reserves and Surplus
2. Demand Deposits (Current and Savings Bank Deposits)

Over 5 years bucket.

Savings Bank and Current Deposits may be classified into volatile and core portions. Savings Bank (10%) and Current (15%) Deposits are generally withdrawable on demand. This portion may be treated as volatile. While volatile portion can be placed in the first time bucket i.e., 1-14 days, the core portion may be placed in over 1- 3 years bucket.

The above classification of Savings Bank and Current Deposits is only a benchmark. Banks which are better equipped to estimate the behavioural pattern, roll-in and roll-out, embedded options, etc. on the basis of past data/empirical studies could classify them in the appropriate buckets, i.e. **behavioural** maturity instead of **contractual** maturity, subject to the approval of the Board/ALCO.

3. Term Deposits

Respective maturity buckets. Banks which are better equipped to estimate the behavioural pattern, roll-in and roll-out, embedded options, etc.

on the basis of past data/empirical studies could classify the **retail deposits** in the appropriate buckets on the basis of **behavioural** maturity rather than **residual maturity**. However, the **wholesale deposits** should be shown under respective maturity buckets.

4. Certificates of Deposit, Borrowings and Bonds (including Sub-ordinated Debt)

Respective maturity buckets. Where call/put options are built into the issue structure of any instrument/s, the call/put date/s should be reckoned as the maturity date/s and the amount should be shown in the respective time buckets.

5. Other Liabilities and Provisions

i) Bills Payable

The core component which could reasonably be estimated on the basis of past data and behavioural pattern may be shown under over 1-3 years time bucket. The balance amount may be placed in 1-14 days bucket.

ii) Inter-office Adjustment

The net credit balance may be shown in 1-14 days bucket.

iii) Provisions other than for loan loss and depreciation in investments

Respective buckets depending on the purpose.

iv) Other Liabilities

Respective maturity buckets. Items not representing cash payables (i.e. income received in advance, etc.) may be placed in over 5 years bucket.

6. Export Refinance – Availed

Respective maturity buckets of underlying assets.

B. Inflows

1. Cash	1-14 days bucket.
2. Balances with RBI	While the excess balance over the required CRR/SLR may be shown under 1-14 days bucket, the Statutory Balances may be distributed amongst various time buckets corresponding to the maturity profile of DTL with a time-lag of 14 days.
3. <u>Balances with other Banks</u>	
(i) Current Account	(i) Non-withdrawable portion on account of stipulations of minimum balances may be shown under over 1-3 years bucket and the remaining balances may be shown under 1-14 days bucket..
(ii) Money at Call and Short Notice, Term Deposits and other placements	(ii) Respective maturity buckets
4. <u>Investments (Net of provisions)#</u>	
(i) Approved securities	i) Respective maturity buckets excluding the amount required to be reinvested to maintain SLR corresponding to the DTL profile in various time buckets.
(ii) Corporate debentures and bonds, PSU bonds, CDs and CPs, Redeemable preference shares, Units of Mutual Funds (close ended), etc.	(ii)Respective maturity buckets. Investments classified as NPAs should be shown under over 3-5 years bucket (sub-standard) or over 5 years bucket (doubtful).
(iii) Shares/Units of Mutual Funds (open ended)	(iii)Over 5 years bucket.
(iv) Investments in Subsidiaries/Joint Ventures	(iv) Over 5 years bucket.
(v) Securities in the Trading Book	(v) 1-14 days, 15-28 days and 29-90 days according to defeasance periods.
5 <u>Advances (Performing)</u>	
(i) Bills Purchased and Discounted (including bills under DUPN)	(i) Respective maturity buckets.
(ii) Cash Credit / Overdraft (including _____)	(ii) Banks should undertake a study of behavioural

Provisions may be netted from the gross investments provided provisions are held security-wise. Otherwise provisions should be shown in over 5 years bucket.

TOD) and Demand Loan component of Working Capital.

(iii) Term Loans

6. NPAs (Net of provisions, interest suspense and claims received from ECGC/DICGC)

(i) Sub-standard

(ii) Doubtful and Loss

7. Fixed Assets

8. Other Assets

(i) Inter-office Adjustment

(ii) Leased Assets

C. Contingent Liabilities / Lines of Credit committed / available and other Inflows / Outflows

1. (i) Lines of Credit committed to/ from Institutions

(ii) Unavailed portion of Cash Credit/ Overdraft / Demand loan component of Working Capital limits (outflow)

(iii) Export Refinance - Unavailed (inflows)

2. Letters of Credit / Guarantees (outflow)

and seasonal pattern of availments based on outstandings and the core and volatile portion should be identified. While the volatile portion could be shown in the near-term maturity buckets, the core portion may be shown under over 1-3 years bucket.

(iii) Interim cash flows may be shown under respective maturity buckets.

(i) Over 3-5 years bucket.

(ii) Over 5 years bucket.

Over 5 years bucket

The net debit balance may be shown in 1-14 days bucket. Intangible assets and assets not representing cash receivables may be shown in over 5 years bucket.

Interim cash flows may be shown under respective maturity buckets.

(i) 1-14 days bucket.

(ii) Banks should undertake a study of the behavioural and seasonal pattern of potential availments in the accounts and the amounts so arrived at may be shown under relevant maturity buckets upto 12 months.

(iii) 1-14 days bucket.

Devolvement of Letters of Credit/Guarantees, initially entails cash outflows. Thus, historical trend analysis ought to be conducted on the devolvments and the amounts so arrived at in respect of outstanding Letters of Credit / Guarantees (net of margins) should be distributed amongst various time buckets. The assets created out of devolvments may

be shown under respective maturity buckets on the basis of probable recovery dates.

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|--|------------------------------|
| 3. Repos / Bills Rediscounted (DUPN) / Swaps INR / USD, maturing forex forward contracts etc. (outflow / inflow) | Respective maturity buckets. |
| 4. Interest payable / receivable (outflow / inflow) – Accrued interest which are appearing in the books on the reporting day | Respective maturity buckets. |

Note :

- i. Liability on account of event cash flows i.e. short fall in CRR balance on reporting Fridays, wage settlement, capital expenditure, etc. which are known to the banks and any other contingency may be shown under respective maturity buckets.
- ii. All overdue liabilities may be placed in the 1-14 days bucket.
- iii. Interest and instalments from advances and investments, which are overdue for less than one month may be placed in over 3-6 months, bucket. Further, interest and instalments due (before classification as NPAs) may be placed in over 6-12 months bucket without the grace period of one month if the earlier receivables remain uncollected.

D. Financing of Gap :

In case the negative gap exceeds the prudential limit of 20% of outflows, (1-14 days and 15-28 days) the bank may show by way of a foot note as to how it proposes to finance the gap to bring the mismatch within the prescribed limits. The gap can be financed from market borrowings (call / term), Bills Rediscounting, Repos and deployment of foreign currency resources after conversion into rupees (unswapped foreign currency funds), etc.

Provisions may be netted from the gross investments provided provisions are held security-wise. Otherwise provisions should be shown in over 5 years bucket.

APPENDIX - II

Interest Rate Sensitivity

Heads of Accounts

Rate sensitivity and time bucket

Liabilities

1. Capital, Reserves and Surplus

Non-sensitive.

2. Current Deposits	Non-sensitive.
3. Savings Bank Deposits	Sensitive to the extent of interest paying (core) portion. This may be included in over 3-6 months bucket. The non-interest paying portion may be shown in non-sensitive bucket. Where banks can estimate the future behaviour/sensitivity of current/savings bank deposits to changes in market variables, the sensitivity so estimated could be shown under appropriate time buckets.
4. Term Deposits and Certificates of Deposit	Sensitive and reprices on maturity. The amounts should be distributed to different buckets on the basis of remaining term to maturity. However, in case of floating rate term deposits, the amounts may be shown under the time bucket when deposits contractually become due for repricing.
5. Borrowings – Fixed	Sensitive and reprices on maturity. The amounts should be distributed to different buckets on the basis of remaining maturity.
6. Borrowings – Floating	Sensitive and reprices when interest rate is reset. The amounts should be distributed to the appropriate bucket which refers to the repricing date.
7. Borrowings – Zero Coupon	Sensitive and reprices on maturity. The amounts should be distributed to the respective maturity buckets.
8. Borrowings from RBI	Upto 1 month bucket.
9. Refinances from other agencies.	(a) Fixed rate : As per respective maturity. (b) Floating rate : Reprices when interest rate is reset.
10. <u>Other Liabilities and Provisions</u>	
i) Bills Payable ii) Inter-office Adjustment iii) Provisions iv) Others	i) Non-sensitive. ii) Non-sensitive. iii) Non-sensitive. v) Non-sensitive.
11. Repos / Bills Re-discounted (DUPN), Swaps (Buy / Sell) etc.	Reprices only on maturity and should be distributed to the respective maturity buckets.

Assets

- | | |
|--|--|
| 1. Cash | Non - sensitive. |
| 2. Balances with RBI | Interest earning portion may be shown in over 3 - 6 months bucket. The balance amount is non-sensitive. |
| 3. <u>Balances with other Banks</u> | |
| i) Current Account | i) Non-sensitive. |
| ii) Money at Call and Short Notice, Term Deposits and other placements | ii) Sensitive on maturity. The amounts should be distributed to the respective maturity buckets. |
| 4. <u>Investments (Performing).</u> | |
| i) Fixed Rate / Zero Coupon | i) Sensitive on maturity. |
| ii) Floating Rate | ii) Sensitive at the next repricing date |
| 5. Shares/Units of Mutual Funds | Non-sensitive. |
| 6. <u>Advances (Performing)</u> | |
| (i) Bills Purchased and Discounted (including bills under DUPN) | (i) Sensitive on maturity. |
| (ii) Cash Credits / Overdrafts (including TODs) / Loans repayable on demand and Term Loans | (ii) Sensitive only when PLR/risk premium is changed. Of late, frequent changes in PLR have been noticed. Thus, each bank should foresee the direction of interest rate movements of funding options and capture the amounts in the respective maturity buckets which coincides with the time taken by banks to effect changes in PLR in response to changes in market interest rates. |
| 7. <u>NPAs (Advances and Investments) *</u> | |
| (i) Sub-Standard | (i) Over 3-5 years bucket. |
| (ii) Doubtful and Loss | (ii) Over 5 years bucket. |
| 8. Fixed Assets | Non-sensitive. |
| 9. <u>Other Assets.</u> | |
| (i) Inter-office Adjustment | (i) Non-sensitive. |
| (ii) Leased Assets | (ii) Sensitive on cash flows. The amounts should be |

INFLOWS									
1. Cash									
2. Balances with RBI									
3. Balances with other Banks	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Current Account									
(ii) Money at Call and Short Notice, Term Deposits and other placements									
4. Investments (including those under Repos but excluding Reverse Repos)									
5. Advances (Performing)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Bills Purchased and Discounted (including bills under DUPN)									
(ii) Cash Credits, Overdrafts and Loans repayable on demand									
(iii) Term Loans									
6. NPAs (Advances and Investments) *									
7. Fixed Assets									
8. Other Assets	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Inter-office Adjustment									
(ii) Leased Assets									
(iii) Others									
9. Reverse Repos									
10. Swaps (Sell / Buy)/ maturing forwards									
11. Bills Rediscounted (DUPN)									
12. Interest receivable									
13. Committed Lines of Credit									
14. Export Refinance from RBI.									
15. Others (specify)									
B. TOTAL INFLOWS									
C. MISMATCH (B-A)									
D. CUMULATIVE MISMATCH									
E. C as % To A									

* Net of provisions, interest suspense and claims received from ECGC/DICGC.

ANNEXURE - II

Name of the bank :

Statement of Interest Rate Sensitivity as on :

(Amounts in Crores of Rupees)

	<u>INTEREST RATE SENSITIVITY</u>
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LIABILITIES	1-28 days	29 days and upto 3 months	Over 3 months and upto 6 months	Over 6 months and upto 1 year	Over 1 year and upto 3 years	Over 3 Years And Upto 5 Years	Over 5 years	Non-sensitive	Total
1. Capital									
2. Reserves & Surplus									
3. Deposits	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Current Deposits									
(ii) Savings Bank Deposits									
(iii) Term Deposits									
(iv) Certificates of Deposit									
4. Borrowings	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Call and Short Notice									
(ii) Inter-Bank (Term)									
(iii) Refinances									
(iv) Others (specify)									
5. Other Liabilities & Provisions	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Bills Payable									
(ii) Inter-office Adjustment									
(iii) Provisions *									
(iv) Others									
6. Repos									
7. Bills Rediscounted (DUPN)									
8. Swaps (Buy/Sell)									
9. Others (specify)									
A.TOTAL LIABILITIES									

* Excluding provisions for NPAs and investments.

ASSETS									
1.Cash									
2.Balances with RBI									
3.Balances with other Banks	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Current Account									
(ii) Money at Call and Short Notice, Term Deposits and other placements.									
4.Investments (including those under Repos but excluding Reverse Repos)									
5.Advances (Performing)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i) Bills Purchased and Discounted (including bills under DUPN)									
(ii) Cash Credits, Overdrafts and Loans repayable on demand									
(iii) Term Loans									
6. NPAs (Advances and Investments) *									
7. Fixed Assets									
8. Other Assets	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i)Inter-office Adjustment									
(ii) Leased Assets									
(iii) Others									
9. Reverse Repos									
10. Swaps (Sell/ Buy)									
11.Bills Rediscounted (DUPN)									
12. Others (specify)									
B.TOTAL ASSETS									
C. GAP (B-A)									
OTHER PRODUCTS (INTEREST RATE)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
(i)FRAs									
(ii)Swaps									
(iii)Futures									
(iv)Options									
(v)Others									
D. TOTAL OTHER PRODUCTS									
E.NET GAP (C-D)									
F.CUMULATIVE GAP									
G. E AS % TO B									

* Amounts to be shown net of provisions, interest suspense and claims received from ECGC/DICGC.

ANNEXURE - III

Name of the Bank :

Statement of Short-term Dynamic Liquidity as on

(Amounts in Crores of Rupees)			
A. Outflows			

		1- 14 days	15-28 days	29-90 days
1	Net increase in loans and advances			
2	Net increase in investments: i) Approved securities ii) Money market instruments (other than Treasury bills) iii) Bonds/Debentures /shares iv) Others			
3	Inter-bank obligations			
4	Off-balance sheet items (Repos, swaps, bills discounted, etc.)			
5	Others			
	TOTAL OUTFLOWS			
	B. Inflows			
1	Net cash position			
2	Net increase in deposits (less CRR obligations)			
3	Interest on investments			
4	Inter-bank claims			
5	Refinance eligibility (Export credit)			
6	Off-balance sheet items (Reverse repos, swaps, bills discounted, etc.)			
7	Others			
	TOTAL INFLOWS			
	C. Mismatch (B - A)			
	D. Cumulative mismatch			
	E. C as a % to total outflows			