UNIT—1: COMPONENTS OF ASSETS AND LIABILITIES IN BANK'S BALANCE SHEET AND THEIR MANAGEMENT

- ✓ ALM encompasses the <u>analysis and development of goals and objectives</u>, the development of long term strategic plans, periodic profit plans and rate sensitivity management.
- ✓ Assets represent the <u>uses of funds</u> to generate revenue for the Bank.
- ✓ Reserves and Surplus includes <u>Share premium and balance in P&L account.</u>
- ✓ Borrowings consists of <u>Refinance from RBI and other institutions</u>.
- Other Liabilities are Bills Payable, Inter-office adjustments, Interest accrued & others like provision for IT, tax deductions at sources, interest tax, provisions etc.
- ✓ Money at Call and Short Notice includes all loans made in the inter bank call money market that are repayable within 15 days notice.
- ✓ A major item in Bank's Balance Sheet is investment in various securities.
- Cash credits, Overdrafts, and loans repayable on demand falls under the category of <u>loans</u> repayable on demand though they may have a specific due date.
- ✓ The income on Investments is of two types <u>Dividends</u> and <u>Interest</u>.
- ✓ The other income includes profit on sale of <u>Investments</u> and <u>other assets</u>.
- ✓ Dividends from Subsidiaries and Joint ventures are part of <u>Other Income.</u>
- ✓ The heart of Bank's financial management is <u>Risk Management.</u>
- ✓ The deregulated environment has not only led to introduction of discriminate pricing policies but also highlighted need to match maturities of assets & liabilities
- ✓ The ALM involves interest rates, exchange rates and liquidity risks.
- ✓ ALM is the act of planning, acquiring and <u>directing the flow of funds</u> through an organization.
- ✓ ALM requires understanding of market area in which <u>Bank operates</u>.

- ✓ The strategy of actively managing the composition and mix of assets and liabilities portfolio is called <u>balance sheet restructuring</u>.
- ✓ The primary management goal is the control of interest income and expenses and the resulting net interest margins <u>on an ongoing basis.</u>
- ✓ The reasons for growing significance of ALM are <u>Volatility</u>, <u>Product Innovation</u>, <u>Regulatory</u> <u>Environment and Management Recognition</u>.
- ✓ The Central Banks in various countries including RBI have issued <u>framework and guidelines</u> for banks to develop ALM policies.
- ✓ The parameters that are selected for the purpose of stabilizing ALM of banks are <u>Net</u> <u>Interest Income</u>, <u>Net Interest Margin</u> and <u>Economic Equity Ratio</u>.
- ✓ Net Interest Income = Interest Income Interest Expenses.
- ✓ To stabilize short term profits banks have to minimize <u>fluctuations in NII.</u>
- ✓ Net Interest Margin = Net Interest Income / Average Total Assets.
- ✓ Net Interest Margin can be viewed as the <u>Spread on earning assets.</u>
- ✓ Economic Equity Ratio is ratio of <u>shareholders funds to total funds.</u>
- Price matching basically aims to maintain spread by ensuring deployment of liabilities at a rate higher than costs.
- ✓ Liquidity is ensured by grouping the assets and liabilities based on their <u>maturing profiles.</u>
- Rising interest will benefit incase of <u>positive gap</u> i.e. Assets > Liabilities and declining interest will benefit incase of <u>negative gap</u> i.e. Liabilities < Assets.
- ✓ At Macro level ALM leads <u>formulation of critical business policies</u>, <u>efficient allocation of capital</u> and designing of products with appropriate pricing strategies.
- ✓ At micro level the objectives of ALM aims at achieving profitability through price matching and ensuring liquidity by means of maturity matching.
- ✓ ASSET LIABILITY MANAGEMENT : ALM is the act of planning, acquiring and directing the flow of funds through an organization. The ultimate objective of this process is to generate adequate / stable earnings & to steadily build organization's equity over time, while taking reasonable and measured business risk.

- ✓ Various sources of raising funds are: 1) Capital 2) Reserves & Surpluses 3) Deposits 4) Borrowings 5) Other liabilities and Provisions 6) Contingent liabilities.
- ✓ The assets side of the Bank's balance sheet consists 1) Cash & balances with RBI 2) Balances with Banks & Money at Call & Short Notice 3) Investments 4) Advances 5) Fixed Assets 6) Other Assets.
- ✓ Reasons for growing significance of ALM are:
- ✓ 1. Volatility due to deregulation of financial system, interest rates and price level.
 2. Rapid Innovation of financial products of Banks
 3. Requirement under the Regulatory Environment 4. Increasing awareness among the Top Management..
- The other assets of a Bank includes Inter-office adjustments, Interest accrued, Tax paid in advance / tax deducted at source, Stationary and stamps, Non-Banking assets acquired in satisfaction of claims and other items i.e. clearing items, unadjusted debit balances and advances provided to the employees.
- Contingent Liabilities includes 1) Claims against the bank not acknowledged as debts, liability for partly paid investments, liability on forward exchange contracts and other items like arrears of cumulative dividends, bills rediscounted, underwriting, Commitments, estimated amount of contracts remaining to be executed on capital account and not provided for etc.
- ✓ An effective ALM technique aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of assets and liabilities as a whole so as to attain a predetermined acceptable risk / reward ratio.

<u>UNIT – 2 : LIQUIDITY MANAGEMENT</u>

- ✓ The objectives of ALM are ensuring <u>profitability</u> and <u>liquidity</u>.
- ✓ The Interest Rate Risk, Market Risk, Operational Risk, Technology Risks and Foreign Exchange Risks can threaten the <u>very solvency of the Bank.</u>
- ✓ Banks need liquidity to fund <u>loan demands</u> & to meet <u>deposit withdrawals.</u>
- ✓ A Bank's liquidity is determined by variability of <u>loan demands and deposits.</u>
- ✓ Liquidity is ability to accommodate <u>decrease in liability</u> & / <u>increase in assets.</u>
- ✓ A Bank said to has adequate liquidity if it can obtain sufficient funds either by increasing liability or by converting assets promptly at <u>reasonable cost</u>.
- ✓ If liquidity needs are not met through liquid assets / holdings, bank may be forced to restructure / acquire additional liabilities under <u>adverse market conditions.</u>
- Liquidity Management is the process of generating funds to meet contractual obligations or relationship obligations at <u>reasonable price at all times.</u>
- ✓ Monitoring of <u>economic</u> and <u>money market trends</u> is key to liquidity planning.
- ✓ Funding Risks, Time Risks and Call Risks are <u>Liquidity</u> Risks.
- ✓ Call Risks include <u>Crystallization of contingent liabilities</u>, Swaps & Options.
- ✓ New loan demands, existing loan commitments and deposit withdrawals are basic contractual or relationship obligations that <u>bank must met.</u>
- <u>Maturity ladder</u> is comparison of future cash inflows to its future cash outflow over a series of specific time periods.
- The mismatch levels for time bucket of 1 14 days and 15 28 days remains around <u>20%</u> of cash out flows.
- ✓ Short term cumulative gap upto one year at <u>15% of total outflow of funds</u>.
- Measuring & Managing funds requirement can be done through <u>Stock Approach</u> and <u>Flow</u> <u>Approach.</u>

- ✓ Core deposits constitutes, public deposits in the <u>normal course of business.</u>
- ✓ Loan is treated to be less liquid asset.
- ✓ Flow Approach is called <u>Gap Method</u> of measuring & managing the liquidity.
- ✓ Gap Method requires the preparation of <u>Structural Liquidity Gap</u> report.
- ✓ In Gap Method the net funding requirement is calculated on the basis of <u>residual</u> <u>maturities</u> of assets and liabilities.
- ✓ The analysis of net funding requires construction of <u>maturity ladder</u>.
- ✓ <u>A maturity ladder</u> should be used to compare a bank's future cash inflows to its future cash outflows over a series of specified time periods.
- ✓ Closer large gap gets the more difficult it is to <u>offset</u>.
- ✓ The banks will collect data on relatively distant periods so as to maximize the opportunities to close the gap before it gets too close.
- ✓ Alternate scenarios involves measures on the behavior of cash flows under <u>different</u> <u>conditions.</u>
- ✓ Alternate scenarios are general market conditions & Bank specific crises.
- ✓ Under bank specific crises many of the banks liabilities could not be rolled over or replaced and would have to be repaid at maturity so that the bank would have to wind its books to some degree.
- ✓ Under General market crises liquidity affects <u>all banks in one or more markets.</u>
- ✓ The time frame for active liquidity management is <u>short.</u>
- ✓ Bank's saleable loans portfolio belongs to less liquid category assets.
- ✓ <u>Unmarketable</u> assets are least liquid category assets.
- ✓ Strategy to handle a crisis and cash access in emergency are two components of <u>effective</u> <u>contingency plan</u>.
- ✓ 44. Bank's liquidity is the process of generating funds to meet contractual relationship obligations at <u>reasonable prices</u> at all times.

✓ Important functions of effective liquidity management

- Demonstrates that the bank is safe and capable of repaying its borrowings 2) Enables to meet prior loan commitments 3) Avoids the un profitable sale of assets and 4) Lowers the payment of default risk premium for funds.
- ✓ A banks liquidity position depends upon:
- Historical funding requirements 2) Current liquidity position 3) Anticipated future funding needs 4) Sources of funds 5) Options for reducing funding needs 6) Present and anticipated asset quality 7) Present and future earning capacity 8) Present and planned capital position.
- ✓ The factors that affect liquidity :
- Decline in earnings 2) Increase in NPA 3) Deposit concentrations 4) Down grading by rating agencies 5) Expanded business opportunities 6) Acquisitions and 7) New tax initiatives.
- ✓ To satisfy the funding needs, we can
- Dispose off liquid assets 2) Increase short term borrowings 3) Decrease holdings of less liquid assets 4) Increase liabilities of a term nature and 5) Increase capital funds.
- ✓ To manage Liquidity Risks, we have to 1) Develop a structure 2) Set Tolerance level and limits for Liquidity Risks and 3) Measure and Manage Liquidity Risk.
- Business in multiple currency adds a lager complexity because the Foreign Liability holders may not be able to distinguish between rumors and facts and business may not always be able to mobilize domestic liquidity to meet Foreign Currency funding requirements.
- Tolerance level or limit for liquidity risk can be set on 1) The cumulative cash flow mismatches 2) Percentage of liquid assets to short term liabilities 3) A limit on loan to deposit ratio 4) a limit on loan to capital ratio 5) a general limit on funding needs and available sources 6) Primary source for meeting funding needs should be qualified 7) Flexible limits on the percentage of relieve pm a particular liability category and 8) Limit on dependence on individual customers.

- ✓ Stock Approach consists of:
- ✓ Ratio of Core deposits to total assets
- ✓ Ratio of time deposits to total deposits.
- ✓ Ratio of Net loans to deposits (Lower ratio is required)
- ✓ Ratio of volatile liability to total assets.
- ✓ Ratio of Short term liabilities to liquid assets.
- ✓ Ratio of Liquid assets to total assets.
- ✓ Ratio of short term liabilities to total assets.
- ✓ Ratio of prime assets to total assets.
- ✓ Ratio of market liabilities to total assets.

UNIT 3: INTEREST RATE RISK MANAGEMENT

- ✓ Falling Interest Rates increase the market value of Assets and Liabilities.
- ✓ The present value of future cash flows <u>change</u> when interest rate changes.
- ✓ Market value of an asset / liability is <u>conceptually equal</u> to the present value of current and future cash flows from that asset or liability.
- ✓ The rising interest rates increases the discount rate on <u>those cash flows</u> and decreases the <u>market value of that asset or liability</u>.
- Interest Rate Risk refers to volatility in <u>Net Interest Income</u> or <u>variations in net interest</u> <u>margin.</u>
- ✓ Interest Rate Risk arises from holding assets and liabilities with different <u>Principal</u> <u>amounts</u>, <u>Maturity dates</u> or <u>Re-pricing dates</u>.
- Interest Rate Risk broadly classified into mismatch or Gap Risk, Basis Risk, Net Yield Curve Risk, Price Risk and Reinvestment Risk.
- ✓ Interest rate of different assets and liabilities may change in different magnitudes, it is called <u>Basis Risk.</u>
- ✓ If the assets are re-priced more rapidly than the liabilities during a particular period, then the bank is <u>asset sensitive</u>.
- ✓ Any increase in Interest Rate will cause an erosion in the liability sensitive Bank's <u>Net</u> <u>Interest Income (NII)</u>
- ✓ A rise or fall in interest rate in a liability sensitive situation has the <u>opposite effect</u> on the NII than on an asset sensitive situation.
- ✓ There is no timing difference between the re-pricing dates in <u>perfectly matched</u> gap.
- ✓ The risk that arises due to changes of interest rates of different assets and liabilities with differed magnitudes is called <u>Basis Risk.</u>
- ✓ The degree of basis risk is <u>fairly high</u> in respect of banks that create composite assets out of composite liabilities.
- ✓ Net Interest Position Risk arises out of <u>net interest earned.</u>

- ✓ The Risk of prepayments of loans and bonds and or premature withdrawal of deposits is called <u>Embedded Option Risk.</u>
- ✓ <u>An yield curve</u> is a line on which a line a graph plotting the yield of all maturities of a particular instrument.
- ✓ <u>Price Risk</u> occurs when assets are sold before their maturity dates.
- ✓ In the financial market, bond prices and bond yields are <u>inversely</u> related.
- ✓ Uncertainty with regard to interest rate at which the future cash flow can be reinvested is called Reinvestment Risk.
- ✓ Short-term bonds have more <u>Reinvestment</u> Risk whereas long-term bands have more <u>Price</u> Risk.
- ✓ In order to reduce <u>Reinvestment</u> Risk, banks try to match the duration of their assets and liabilities and not their maturities.
- ✓ In the earnings prospective the focus of analysis is the impact of changes in interest rates on <u>accrual</u> or <u>reported earnings</u>.
- Reduced earnings or outright losses can threaten the <u>financial stability</u> of an institution by undermining its capital adequacy & by reducing market confidence.
- The impact of changes in interest rates on accrual or reported earnings is called <u>Earnings</u> <u>Prospective.</u>
- The effect of changes in interest rates on the economic value of a bank's assets, liabilities
 & OBS positions is called <u>Economic value Prospective.</u>
- The economic value perspective considers the potential impact of interest rate changes on the present value of all future cash flows.
- Sensitivity of a bank's economic value of <u>fluctuations in interest rates</u> is an important consideration of share holders, management and supervisors alike.
- ✓ The Economic Value perspective provides a more comprehensive view of the potential long term effects of <u>changes in interest rates</u> than offered by the earnings perspective.
- ✓ To develop effective Risk Management strategies or techniques, it is a must to <u>identify</u> <u>and quantify</u> the risk involved.

- ✓ Banks should have interest rate risk measurement system that captures all material sources interest rate risk and that asses the effects of rate change on both earning and economic value.
- ✓ A negative or liability sensitive gap occurs when liabilities <u>exceed assets</u> in a given time bond.
- ✓ A negative gap decreases the net interest income when there is increase in market interest rate.
- ✓ A positive or asset sensitive gap occurs when <u>assets</u> exceed <u>liabilities</u> in a given time bond.
- ✓ A positive gap mean an increase in market interest rates will increase the <u>net interest</u> income.
- ✓ The Gap Analysis does not take into account the <u>variation in the characteristics</u> of different positions within a time band.
- ✓ In Gap Analysis all positions within a given time band are <u>assumed to mature or re-price</u> simultaneously.
- ✓ Gap Analysis ignores <u>differences in spreads</u> between interest rates that could arise as the level of market interest changes.
- ✓ Gap Analysis does not take into account any changes in the timing to payments that might occur as a result of changes in <u>interest rate environment.</u>
- ✓ Gap Analysis provides only rough approximation of actual changes in <u>NII.</u>
- ✓ Gap Analysis fails to capture variability in <u>non-interest revenue & expenses</u>.
- Duration is a measure of the percentage change in the economic value of a position that will occur given a <u>small change</u> in the level of interest rate.
- ✓ Generally longer the maturity or next re-pricing date of instrument & smaller the payments that occur before the maturity, then duration will be <u>higher.</u>
- ✓ Higher duration implies that a given change in the level of interest rates will have a <u>larger</u> impact on economic value.
- ✓ In static simulations, the cash flow arising solely from the bank's <u>current on and off</u> <u>Balance Sheet positions</u> are assessed.

- ✓ The Simulations entail relatively straight forward shifts or tilts of the yield curve or <u>changes of spreads</u> between different interest rates.
- ✓ One of the most difficult tasks in measuring interest rate risk is how to deal with the positions where behavioral maturity differs from contractual maturity.
- ✓ Prepayments create uncertainty about the <u>timing of the cash flows</u>.
- ✓ Some prepayments arises due to <u>demographic</u> factors such as death, divorce or job transfer.
- ✓ The actual management of bank's assets and liabilities focuses on controlling the gap between rate sensitive assets and rate sensitive liabilities.
- The NII can be insulated from the volatility of interest rate by <u>matching maturities</u> of assets and liabilities closely.
- ✓ Strategies for reducing the sensitivity of assets and liabilities are A) Reduce asset sensitivity and reduce liability sensitivity.
- ✓ Full match re-pricing assets and liabilities are neither <u>feasible</u> nor <u>prudent.</u>
- ✓ Maturity or re-pricing schedules are those which distributes interest sensitive assets, liabilities and OBS positions into a certain number of predefined time bands according to their maturity or re-pricing.
- ✓ For measuring bank's interest rate risk exposures if the assets, liabilities and OBS positions are to be distributed into a certain number of predefined time bands according to their maturity or pricing, these are called re-pricing schedules.
- ✓ Gap Analysis: Under Gap Analysis, to evaluate the earnings exposure, interest rate sensitive liabilities in each time band are subtracted from the corresponding interest rate sensitive assets to produce a re-pricing gap for that time band. This gap can be multiplied by an assured change in interest rates to yield on approximation of the change in net interest income that would result from such an interest rate movement. The size of 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 Judgement of bank management.
- ✓ Asset sensitivity can be reduced by A) Extend investment portfolio maturities B) Increase floating rate deposits C) Increase fixed rate lending D) Sell floating rate loans E) Increase short-term borrowings F) Increase long term lending.

- ✓ Liability sensitivity can be reduced by A) Reducing investment portfolio B) Increasing floating rate lending C) Increasing long term deposits D) Increasing short term lending
- ✓ The other options available to banks for managing interest rate risk are:
- Match long term assets preferably with non-interest bearing liabilities.
- o Match re-priceable assets with a similar re-priceable liabilities.
- Use forward rate agreements, Swaps, Options & financial futures to construct synthetic securities and thus hedge against any exposure to interest rate risk.
- Maturity mismatch is accentuated by proliferation of performing assets (NPAs)
- ✓ And long re-negotiations, sound lending policies and effective post sanction monitoring and recovery steps can contain the volume of NPAs. Large volume of NPA in the Balance Sheet entail carrying of non-interest earning assets funded out of volatile liabilities.
- ✓ An effective system of internal control for interest rate risk includes:
- A strong control environment B) An adequate process for identifying and evaluating risk C) The establishment of control activities such as policies procedures and methodologies D) Continual review of adherence to established policies and procedures.
- Basic elements in management of assets, liabilities and OBS instruments are:
 A)Appropriate board and senior management over sight.
 B) Adequate Risk management policies and procedures.
 - C) Appropriate risk measurement monitoring and control functions
 - D) Comprehensive internal controls and independent audits.
- ✓ In a dynamic Simulation approach, the Simulation builds in more detailed assumptions about the future course of interest rates and expect changes in a bank's business activity over that time.
- Simulation techniques typically involve detailed assessment of the potential effects of the changes in interest rates on earnings and economic value by simulating the future path of interest rates and their impact on <u>cash flows.</u>

CHECK YOUR PROGRESS

- ✓ 54.<u>Changes in interest rates</u> affect underlying value of bank's Assets & Liabilities.
- Rise in interest rates <u>decrease</u> the market value of assets & liabilities, conversely falling interest rates <u>increase</u> market value of assets & liabilities.
- ✓ The Gap is the difference between the amount of assets and liabilities on which the interest rates are <u>reset</u> during a given period.
- ✓ Mismatch occurs when assets & liabilities fall due for re-pricing in <u>different periods.</u>
- The economic value of a bank can be viewed as the present value of the bank's expected net cash flow.
- Estimates derived from a standard duration generally focus on just one form of interest rate risk exposure i.e. re-pricing risk.
- ✓ Interest rate risk can be managed by matching re-priceable assets with re-priceable liabilities.
- ✓ Proliferation of NPA results in increasing <u>maturity mismatches.</u>
- ✓ The adverse impact on NII due to mismatches can be minimized by fixing appropriate tolerance limit on interest rate sensitivity gaps.

UNIT – 4 : MANAGEMENT OF EXCHANGE RISK

- ✓ To be hedged against exchange risks bank must <u>match</u> its assets and liabilities in each foreign currency.
- ✓ Bank is fully hedged only if it holds assets and liabilities of <u>exactly the same maturities.</u>
- ✓ Transaction exposure is the risk involved due to change in the Foreign Exchange rate between the <u>time, the transaction is executed and it is settled</u>.
- ✓ Translation exposure relates to <u>valuation</u> of Foreign Currency assets and liabilities at the end of accounting year at current realizable values.
- Operating exposure is a measure of <u>sensitivity of future cash flows</u> and <u>profits of a bank</u> to unanticipated exchange rate changes.
- ✓ The amount of Foreign Exchange Risk is dependent on the level of <u>exposure and</u> <u>unanticipated changes.</u>
- ✓ The first major decision on Forex risk management is to <u>fix limit</u> on open foreign exchange position.
- ✓ The open Foreign exchange position limits are of two types <u>Day light limit</u> and <u>Overnight limit</u>.
- The various tools available for hedging of Foreign Exchange transactions are 1) Forwards
 2) Futures 3) Options 4) Swaps 5) Money market instruments.
- A Forward Contract is an agreement to <u>buy or sell</u> FE for a predetermined amounts at a predetermined rate and on a predetermined date.
- Right to buy under currency Options is called <u>Call Option</u> and right to sell is known as <u>Put</u> <u>Option</u>.
- Currency Futures are forward contracts in which two parties oblige themselves to exchange something in future.
- ✓ The exchange rate fluctuates depending on several factors like demand, supply, balance of payments, trade deficit, Government borrowings, inflation, interest rate, political environment etc.

- ✓ Foreign Exchange Risk is defined as a measure by the variance of the domestic currency value of an asset, liability or operating income that is attributable to unanticipated change in the exchange rate.
- ✓ Foreign Exchange Risk the risk that relates to gains or losses that arise due to fluctuations in the exchange rates.
- An appreciation or a depreciation in the exchange rate will lead to a change in value of all assets and liabilities that are denominated in foreign currency.
- ✓ An appreciation in domestic currency will decrease the value of assets and liabilities denominated in foreign currency, while a depreciation in the value of domestic currency will enhance the value of assets and liabilities denominated in foreign currency.
- ✓ The Banks face both Foreign Currency & Foreign Interest Rate Risks to the extent of mismatch of their portfolio and maturity exposures in different currency assets and liabilities.
- ✓ Foreign Exchange Risk may be defined as the risk that a bank may suffer losses as a result of adverse exchange rate movements during a period in which it has an open position either spot or forward or a combination of both in an individual Foreign Currency.
- ✓ Foreign Exchange exposure can be broadly classified into three categories depending upon the nature of exposure. They are 1) Transaction exposure 2) Translation exposure and 3) Operating exposure.
- ✓ Foreign Exchange transactions which may expose bank to transaction exposure are A) Purchase or Sale of goods in foreign currency B) Loan repayments to be made in Foreign Currency C) Dividends paid or received in Foreign Currency.
- ✓ Translation exposure becomes a transaction exposure at some point of time when the Foreign Exchange is extinguished through sale and purchase of foreign currency.
- ✓ A FE Option is a contract for future delivery of a currency in exchange for another where the holder of the option has the right without an obligation to buy or sell the currency at an agreed price on a specified future date.
- ✓ The difference between Futures and Forward Contracts is forward contracts are over the counter products with no secondary market or transferability where as Futures are traded on an exchange.

- ✓ SWAPS: A Swap is a financial transaction in which two counter parties agree to exchange stream of payments or cash flow over a time on the basis agreed at the inception of such arrangement.
- ✓ Under SWAP, two counter parties agree to exchange specific amounts of two different currencies at the outset and repay these over a time in installments reflecting interest & principal.
- ✓ In some cases there may not be any exchange of currencies at the outset but only the servicing payments are Swapped. Exchanging cash flow in one currency for cash flow in another.

✓ UNIT – 5: RBI GUIDELINES

- Guidelines were issued vide RBI circular <u>BPBC.8/2/-04-098/99 Dt. 10.02.99.</u>
- ✓ 2. ALCO should be headed by <u>CEO / CMD / ED.</u>
- ✓ 3. Banks should set up an internal <u>Asset Liability Committee (ALCO).</u>
- ✓ 4. The management Committee or any specific committee of the board should oversee the <u>implementation of the systems and review</u> of its functioning periodically.
- ✓ 5. Banks should ensure coverage of at least <u>60%</u> of their Assets & Liabilities under ALM.
- ✓ 6. It is necessary that banks set targets in the interim for covering <u>10%</u> of their business by 01.04.2000.
- ✓ 7. In order to capture the maturity structure of the cash inflows & outflows the statement of structural Liquidity should be prepared.
- ✓ 8. In respect of 1 − 14 days bucket & 15 − 28 day bucket bank's management should keep the cash flow mismatches at the minimum level.
- ✓ 9. ALM involves assessment of various types of risks and <u>altering the asset liability</u> <u>portfolio</u> in a dynamic way in order to manage risks.
- ✓ 10. ALM process rests on <u>three pillars</u>, they are ALM information system, ALM Organistion and ALM process.
- ✓ 11. ALM information systems consists of <u>Management information system</u>, <u>Information</u> <u>availability</u>, <u>accuracy</u>, <u>adequacy</u> and <u>expedience</u>.
- ✓ ALM organization consists of <u>Structure</u> and <u>responsibilities</u>.
- ✓ ALM process consists of Risk parameters, Risk identification, Risk measurement, Risk management and Risk policies and tolerance levels.
- ✓ <u>Information</u> is the key to the ALM process.
- ✓ ALM analyses information on the basis of <u>residual maturity</u> & <u>behavioral pattern</u>
- ✓ The successful implementation of risk management requires strong commitment of <u>senior</u> <u>management.</u>
- ✓ The board should set <u>limits</u> for liquidity, interest rate, foreign exchange and equity price risks.

- ✓ ALCO should be responsible for ensuring adherence to the limits set by the board as well as for deciding <u>business strategy</u> of the bank in line with budget.
- ✓ ALM support groups should be responsible for analyzing, monitoring & reporting the <u>risk</u> <u>profiles</u> to the ALCO.
- ✓ ALCO is an decision making unit responsible for Balance Sheet planning from risk return prospective including the strategic management of interest rate and liquidity risks.
- ✓ ALCO should consider <u>product pricing</u> both for deposits & advances in addition to monitoring the risk levels of the bank.
- ✓ By assuring a bank's ability to meet its liabilities, liquidity management can reduce the probability of developing an <u>adverse situation</u>.
- ✓ The maturity profile could be used for measuring <u>future cash flows</u> of the bank in different time buckets.
- ✓ Mismatches upto one year provide early signals of <u>impending liquidity</u> problems.
- ✓ The mismatches during 1 14 days and 15 28 days in normal course may not exceed <u>20%</u> of the cash outflow in each time bucket.
- Statement of structural liquidity may be prepared by placing all cash inflows and outflows in <u>the maturity ladder.</u>
- ✓ Dealing in different currencies brings opportunities and <u>also risks.</u>
- The simplest way to avoid currency risk is to ensure that mismatches, if any are <u>reduced</u> to zero or <u>near zero</u>.
- ✓ <u>SODHANI</u> Committee is expert group on Foreign Exchange Markets in India.
- ✓ <u>Interest rate risk (IRR)</u> is the risk where changes in market interest rates might adversely affects a bank's financial condition.
- ✓ The GAP or mismatch risk can be measured by calculating gaps over different time intervals as at a given date .
- ✓ The Gap is difference between <u>rate sensitive assets</u> & <u>rate sensitive liabilities</u> for each time bucket.

- ✓ ALM is concerned with risk management and provides comprehensive and dynamic frame work for measuring. Monitoring and managing liquidity risk, interest rate risk, foreign exchange risk, equity risk and commodity price risk of a bank that needs to be closely integrated with the banks business strategy.
- ✓ ALCO will have to develop a view on future direction of interest rates 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.
- ✓ ALM functions are 1) Liquidity and risk management 2) Market Risk management 3) Trading Risk management 4) Funding Risk management 5) Profit planning and growth projection.
- ✓ For measuring and managing net funding requirements, the use of maturity ladders and calculation of cumulative surplus or deficit of funds at selected maturity dates is adopted as a standard tool.
- ✓ Securities held in the trading book are subject to certain pre-conditions like:
- The composition and value are clearly defined. 2) Maximum maturity / duration of the portfolio is restricted. 3) The holding period not to exceed 90 days 4) Cut loss limit prescribed 5) Defeasance periods i.e. time taken to liquidate in secondary market are prescribed 6) Marking to market in a daily / weekly basis and revolution gain / loss charged to the P & L.
- The immediate impact of changes in interest rates is on bank's earnings by changing its NII. A long term impact of changing interest rate is an bank's market value of equity (MVE) or net worth as the economic value of bank's assets, liabilities and OBS positions get affected due to variation in market interest rates.

TIME BUCKETS

- ✓ Capital & reserves over 5 years bucket
- ✓ Demand deposits SB 10% CA 15% are volatile & volatile portion
- \circ And volatile portion should be shown in 1 14 days bucket and core portion may be placed in over 1 3 years bucket.
- \checkmark Bills payable the core component may be shown under 1 3 years
- bucket and the rest in 1 14 days bucket.
- ✓ Inter office adjustments the net balance may be shown in 1 −14 days
- o Bucket.
- ✓ CASH 1 14 DAYS BUCKET:
- \checkmark Balance with RBI over & above CRR 1 14 days bucket and CRR as per maturity of DTL.
- ✓ Balances with other banks Minimum balance required in 1 3 years bucket & remaining in 1 14 days bucket.
- ✓ Substandard Assets over 3 5 years bucket & doubtful debts over 5 years bucket.
- ✓ Shares, units of mutual funds (open ended) over 5 years bucket.
- ✓ Investment in Subsidiaries / Joint venture over 5 years bucket.
- ✓ Securities in trading book 1 14 days, 15 28 days and 29 90 days according to defeasance periods.
- ✓ Fixed assets over 5 years bucket
- Intangible assets over 5 years bucket
- ✓ All Overdue liabilities 1 14 days bucket.

INTEREST RATE SENSITIVITY

- ✓ Capital, Reserves, Surpluses and Current deposits are non sensitive.
- ✓ Savings Bank non interest paying portion non sensitive and portion on which interest is payable may be included in 3 – 6 months bucket.
- ✓ Borrowings from RBI upto one month bucket.
- ✓ Bills payable, inter office adjustments, provisions non sensitive.

ASSETS:

- ✓ Cash non sensitive
- ✓ Balance with RBI interest earning portion 3 6 months bucket and the balance amount is non – reactive.
- ✓ Balance with other banks –

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