Chapter - III

Concepts, principles and regulations of credit risk management
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3.1 Introduction
Banks have faced difficulties, which sometimes have led to bank failures also for various reasons. The main cause of any serious banking problems appears to emanate from the credit portfolio of the bank. An enquiry into many bank failures or bank’s poor financial soundness has always indicated that such difficulties are directly related to lax credit standards of lending and poor credit risk management. Not understanding changes in economy or other factors or not taking corrective steps can lead to deterioration in the credit quality and financial standing of the banks. This experience is common in both developed and under developed nations.

3.2 Concept of credit risk
Credit risk in its simplest definition would mean as the potential that a bank borrower or counterparty will fail to meet his obligations in accordance with agreed terms. While the failure of a counter party could also happen in other areas of banking like investment, foreign exchange, guarantee transactions, the major source of credit risk for the banks originate from loans and advances. In fact credit risk is exists throughout all the activities of the bank. Managing the credit risk is essential to improve the profitability of the bank by maximizing bank’s risk adjusted return (i.e., after providing for any loan losses). This involves managing the credit risk both in micro as well as macro situations. The bank has to manage the credit risk of individual transactions and also the portfolio as a whole. Managing credit risk also means managing other related risks such as liquidity risk, interest rate risk, legal risk etc., In fact risk management is enterprise wide and credit risk is a critical component of the system and a comprehensive and balanced approach is needed to achieve the long term goals of the bank.

Credit risk is inherent in every transaction of every bank world-wide. While this is almost axiomatic and bank managements ought to have learnt lessons from past experiences, the frequent bank failures in various countries from time to time and, the financial crisis and melt down of US banks and other European bank even in the recent past indicate that risk management still needs improvement.
Banks should have keen understanding and awareness of the various dimensions of the risks. They should be able to identify measure, monitor and control risks. In case risk occurs, to protect the financial integrity of the bank should have adequate capital.

The risk management practices followed by banks may from bank to bank depend upon various factors. The nature of credit extended, the complexities of transaction, the organizational set up of the bank, legal environment in which the bank operate, the public policies of the government, the nature and economic conditions of the country in which they operate are some of the variables which affect the credit risk management practices.

3.2.1 Principles of credit risk management

Realizing the need to improve and strengthen the system of risk management, Basel Committee on Banking Supervision enunciated sound principles and practices of lending and managing credit risk. These fundamental principles and practices are to be followed along with the existing practices related to assessment of asset quality, the adequacy of provisions and reserves. These general principles have global application in all transactions where credit risk is inherent. However, on-site and off-site supervisory techniques used by the bank and the degree to which external auditors are trained in bank evaluation supervisory functions, the management expectations, on credit risk management also play a role in effective implementation of risk management practices. The main purpose is that that the credit risk management approach used is sufficient for the activities of the bank a sufficient risk-return discipline is established in credit risk management processes of the bank.

The sound principles set out by Basel Committee on Banking Supervision (BCBS) cover five major areas namely

1. Establishing an appropriate credit risk environment;
2. Operating under a sound credit-granting process
3. Maintaining an appropriate credit administration, measurement and monitoring process;
4. Ensuring adequate controls over credit risk
5. Role of supervisor of the banking system (central bank)
Principles and practices covered in each of the broad areas identified by Basel Committee on Banking Supervision are discussed below.

3.2.2 Establishing an appropriate credit risk environment

This area deals with the role of management and their responsibilities in creating a bank-wide and an appropriate credit risk environment to ensure a sound credit risk management system.

A. Responsibility of the Board of Directors of the Bank:

It is the responsibility of the board of directors of the bank to approve and periodically review the strategy of credit risk management. The directors should ensure that all significant risk policies of the bank reflect the level of risk tolerance and expected profitability based on the risk appetite of the bank. They have an important role to play in credit approval and in overseeing of credit risk management functions as in other areas of bank management. Every banks board should develop a risk strategy or plan recognizing that the policies should cover many activities of the bank in which credit risk significant and policies and procedures for conducting such activities.

The Board should ensure that the strategic plan developed clearly spells out the policy of the bank’s willingness to lend. The credit policy should list out types of credit (for example, commercial, consumer, real estate), economic sector (agriculture, manufacturing service mining etc), geographical location (domestic or overseas, specific regions for specific credit types) currency (lending in Rupees or US dollars), maturity (minimum and maximum periods for loans) and anticipated profitability (Minimum interest rate chargeable or base rate and add on spread for different types of loan). It should also cover the identification of target markets (small and medium industries, exports of agricultural products, pharmaceuticals, automobiles, consumer loans and retail loans like housing finance etc.). The policy should also specify the overall parameters (minimum portfolio return of certain %) and characteristics (e.g. 80% of the portfolio should be secured loans, the average maximum maturity period of the portfolio to be less than 5 years) that the bank would want to achieve in its credit portfolio including levels of diversification and concentration tolerances (e.g. overall sectoral credit to mining sector should not exceed 3% of over all credit of the bank). Every bank, regardless of size, or business mix is
in business to make profits. The credit policy should therefore specify the base rate (minimum rate below which the bank will not lend to any borrower) taking into account the cost of capital. The board should ensure that credit risk strategy determines the acceptable risk/reward trade-off, recognizing credit quality, growth and earnings and should provide methods for selecting risks and maximizing profits.

It is to be understood that credit policy is dynamic document and should be periodically reviewed on the basis of the financial results of the bank. Any changes needed due to changes in economic factors, loan concentrations or problem loans, interest rate changes or regulatory directions, then necessary changes must be made to the strategy. Since capital is the bulwark against losses in protecting the banks soundness and financial viability, the board must also determine the level of bank’s capital which is adequate for risks assumed throughout the entire bank.

A joint stock bank is a juristic person with perpetual existence. Therefore in drawing the credit risk strategy the board of directors of any bank should provide continuity in approach. The strategy should consider cyclical aspects of business and economy and provide for resultant changes and shifts in the composition and quality of credit portfolio. The policy should be periodically assessed and if needed amended, to make it viable in the long-run and through various economic cycles.

It is imperative that the credit risk strategy and policies enunciated by the board of directors should be effectively communicated throughout the bank. Every one who assesses, approves, monitors or reports credit risk should clearly understand the bank’s priorities, approach and expectations in granting loans. It should be the general policy of the bank that relevant personnel should be held accountable for complying with established policies and procedures.

Since day to day operations are not supervised by the board, it is important that the board should ensure that senior management is fully capable of managing the credit risk and implement the risk strategy, policies and prudential limits approved by the board. For this purpose the board should see to that competent persons handle the credit portfolio and provide for recruitment and training of such persons either with in credit policy parameters or other wise.

To enable the senior management to discharge their functions effectively, the board of
directors should approve (either within the credit risk strategy or by a separate statement of credit policy), the bank’s credit approval criteria including terms and conditions, the way in which the bank will structure its credit risk management functions (approving and reporting lines of hierarchy) and the process of independent review of (auditing) credit function and overall credit portfolio.

The incentive for the senior management and other functionaries is the reward they get when they perform well. There must also a feeling that deviant behaviour will result in punishment if the system has to function efficiently and smoothly. To achieve these twin goals the board of directors should ensure that the bank’s remuneration policies do not reward unacceptable behaviour which weaken the banks credit risk strategy like exceeding established limits, not obtaining securities or non reporting or mis reporting of exception transactions.

It is recognized well world over that outside directors, can be important sources of new business for the bank. But specific policy must be in place to ensure whether directors can get loans and if so how much and at what terms credit is granted. For avoiding conflicts of interest, it is essential that board members do not override the credit approval and monitoring processes of the bank. It is generally accepted that an interested director is not allowed to be a party to the decision and excuse himself while other directors decide.

B. Role of senior management

While board of directors approves strategy and broad polices, the senior management of the bank should be responsible for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the bank’s activities and at both the individual credit and portfolio levels and implement the same.

The responsibility of the senior management includes ensuring that the bank’s credit-approval process is carried out according to the established strategy. For this purpose they should ensure that written procedures are designed, developed and implemented for each credit activity. To evaluate the success of implementation and make midcourse corrections they must undertake a periodic independent assessment of the bank’s credit risk functions. Loan approval and review responsibilities are clearly
defined and properly assigned.

The design of written policy must include policies and procedures related to identifying, measuring, monitoring and controlling credit risk. The policy must establish the framework for lending and guide operating officials in approving credit applications and also address issues relating to the following:

✓ maintain sound credit approving standards;
✓ monitor and control of credit risk both individual and portfolio
✓ evaluate new business opportunities and inherent risk in them
✓ identifying non-performing loans and recovery of the same

This should naturally result in laying down clearly defined, guidelines consistent with prudent banking practices and in conformity with relevant regulatory requirements with regard to Target markets, portfolio mix, price and non-price terms, the structure of limits, approval authorities, exception reporting, etc.

The policies should also be adequate for the types and complex nature of the bank’s business mix and should be framed in the context of internal factors like staff capabilities, technology constraints and external factors such as the bank’s market position, area of operation, etc. In drafting the policies and procedures the senior managers should make sure that the credit portfolio is adequately diversified given the bank’s target markets and overall credit strategy.

The policy should be framed keeping in line with the target mix the bank wants to achieve with out compromising the individual and group exposure limits of their own internal guidelines but also of the central bank. Specific industries, economic sectors, geographic regions and specific products which reduce risk and improve returns must be incorporated in the policy.

To be effective credit policies must be communicated throughout the organisation, and this becomes one of the major responsibilities of the senior management. Issue of internal circulars, conducting special training programmes, addressing group of officers responsible in meetings are different ways by which the policies can be made know throughout the organization in a short time.

Where a bank encourages international trade financing and grants credit for the same, in addition to standard credit risk, risk associated with conditions in the home country,
other risks like default risk of the foreign borrower, country risk or sovereign risk, risks arising out of economic, political and social environment of that foreign country should also be taken into account by the senior managers. The transfer risk, translation risk and the effect of financial markets globalization risk (by way of imbalance of trade with in a block) of and the potential for spillover effects for the host country and contagion effects for an entire region. The credit policy on international trade or foreign exchange business must be specific in these aspects.

C. Pro active risk management

It is important that the risk management should be pro active. All procedures and controls must be decided in advance before introduction or undertaking to reduce or eliminate the risk inherent in credit products and activities. The identification and risk mitigation measures and controls need to be approved by the board in advance or any appropriate committee or authority entrusted with the responsibility.

The senior mangers have an important role to play in the identification of existing and potential risks inherent in any product or activity. Therefore they should be able to banks identify all credit risk inherent in the products the bank offers and the activities in which the bank is engaged. It is true that such identification is possible only from a careful review of the credit risk characteristics of the product or activity and that’s where the role of the senior manager assumes importance.

In order to expand business banks need to enter into new areas of business. Banks must develop a clear understanding of the credit risks involved in complex credit activities (for example, loans to oil exploration, satellite communications new drug research and development ) asset securitization, customer-written options, advance credit derivatives, etc.,) only because the credit risk involved, may be less obvious and demand more careful analysis than the risk of traditional credit risk. It may also involve more complex credit approval steps and may require tailored procedures and controls, which may require the board approval, may be needed even though the basic principles of credit risk management will still apply. In short if the venture if new or non traditional, banks need to plan significantly and careful oversight to ensure that risks are appropriately identified and the process to manage them are put in place and appropriate approvals are obtained in advance.
While loaded with onerous responsibilities, the senior management also has adequate powers to execute the same. It is senior management who determine who are all will be staff involved in any activity where there is credit risk, on an activity which is established or new, basic or more complex. This is a must since if the risk is not fully managed by capable and competent staff to the highest standards and in compliance with the bank’s policies and procedures the entire exercise of credit management will crumble.

3.2.3 Operating under a sound credit granting process

Banks must establish well defined credit criteria for approval of credit. This criteria must incorporate clear understanding of the borrower (his constitution), business risks the borrower is undertaking,(nature of activity like agriculture, manufacturing, trading or export etc) the purpose of borrowing (like to start, to expand, to diversify business but not for speculation), structure of credit (like term loans, overdrafts, bills discounting or guarantees etc) and source of repayment.

In designing well defined credit criteria, which is essential for sound risk management, the following factors should be taken into account.

- Who is eligible for credit?
- How much credit borrower is eligible for
- What types of credit are available for the borrower
- Under what terms and conditions the credits should be granted.

In order to determine the above four questions banks must receive sufficient information to make a comprehensive analysis of the risk profile of the borrower and assessment of his needs. It is important that the information leading to the decision is documented in approving credit. One could easily relate such information to the age-old wisdom of lending namely the Five Cs – character, credit, capacity, capital and collateral.

A. Know your customer

Banks should understand to whom they are lending. This has significance for different purposes also. Eradication of black money and Anti-money laundering assuming global importance, in an era of terrorist funding, a banker must know his customer better and should become familiar with the borrower and be confident that they are dealing with an individual or organization of sound
repute and creditworthiness. This confidence he must gain prior to entering into any new credit relationship. Therefore, a bank must put in place strict policies for customer identification and antecedent verification with a view to avoid association with individuals involved in fraudulent activities and other crimes. Asking for references, verification through trade associations, checking their personal references and financial condition through rating agencies are some of the steps a bank can initiate in this regard.

The integrity and reputation of the borrower is the first line of defense for a banker. This has to be analyzed with referenced to the repayment history. This indicates his willingness to repay the borrowed sums.

**B. Lending process**

Before lending the purpose of the credit should be analyzed. Where a borrowing is for the purpose of business, there is a possibility that it would be productively employed and generate resources to repay.

The current risk profile of the borrower and his business (its sensitivity to economic and market developments) should be studied to understand the risk undertaken by the bank in lending and to estimate the probability of default.

How much loan is sought and whether the banks’ assessment supports his requirement. It is always prudent to lend the amount required because under financing would harm the business but excess lending also ruins the business equally.

Banks must verify the source of repayments and ensure that repayment is made out of profits and not out of sale of assets or further borrowings.

Banks should clearly specify the proposed terms and conditions of the credit, including covenants designed to restrict adverse changes in the future risk profile of the borrower. While granting credit to a borrower, the bank should also consider where it is appropriate to classify related parties as a single borrower. A related party or connected party or a group has to be defined whether corporate or non-corporate, as an entity which is under a common ownership or control or with strong connecting links like common management, familial ties. Procedures to identify situations of related parties and appropriate steps to classify a group and aggregating exposures to groups accounts and across business activates must be established
Once criteria for granting credit are established the bank should ensure sufficient information is received as per criteria to make proper credit-granting decisions. Bank’s should realize that all and adequate information on the credit criteria would serve as the basis for rating the credit under the bank’s internal rating system.

Even when banks participate in loan syndications or consortium lending fully relying on the credit risk analysis done by the lead underwriter or on commercial loan credit ratings should be avoided. Each member of the syndicate should perform their own independent credit risk analysis in the same manner as other loans and review syndicate terms before committing to the syndication.

Granting loans results in accepting risks for earning profits. The risk/return relationship and overall profitability of the account relationship should be considered before establishing the relationship. The fundamental principle of pricing loans is that pricing should recover all of the imbedded costs and compensate the bank for the risks incurred.

In analyzing risks banks should also consider adverse scenarios and their possible impact on borrowers. Even at the time of granting the advance banks have to recognize that provisions for expected losses need to be made and adequate risk weighted capital is needed to absorb unexpected losses.

C. Repayment and recovery of loan

Equally important is the ability to repay as mere willing to repay still will not avoid risk, an analysis of the current and future capacity of the borrower to repay based on various scenarios and also based on historical and projected financial trends and cash flows should be made.

It should be verified that borrower has the legal capacity to borrow or assume the liability. In the absence of such a capacity, banks may not be able enforce their claim and recover the loans.

Where the banks extend credit for commercial purposes, the borrower’s business expertise and the standing of the borrower in that business sector should be checked.

D. Borrower’s stake

One of the important factors which bank has to consider is the amount of money the
borrower has invested as his stake in the business. Higher the stake of the borrower, higher will be his motivation to run the business profitably leading to timely repayment.

E. Collateral

Acceptance collateral is only a fall back for the banker to recover his dues or to ensure that the credit risk mitigated. A banker would not like to encash his collateral for repayment and would prefer always that his loan is repaid out of business income. Collateral cannot be a substitute for comprehensive assessment of the borrower, nor can replace need for sufficient information. But as risk management measure where applicable bank should obtain collaterals and the adequacy and enforceability of collateral or guarantees, must be ensured under various scenarios. It should be recognized that any recovery by enforcement actions like foreclosure of mortgages will diminish the profit margin on the transaction. Banks should evolve policies and procedures covering the acceptability of various forms of collateral, ongoing valuation of such collateral, and a process to enforce the collateral.

F. Limit Exposures on credit

Banks should establish overall credit limits for individual borrowers as well as groups of connected counterparties. Such limits must aggregate in a realistic manner and compare and consolidate different types of exposures, both funded (like loans overdrafts etc) or non funded (guarantees and letters of credit or acceptances) in the banking and trading book and should include off the balance sheet exposure also. These exposure guidelines can be linked to internal credit ratings also. The actual loan balance should be checked with exposure limits and monitored for taking appropriate action if the limits are breached. Exposure guidelines should also cover industries and economic sectors (for example 5% of bank’s net credit to housing sector), geographic regions (2% of export credit to Nepal) or specific products (1% of incremental advances to reverse mortgage scheme loans or 18% of advances to direct agriculture). As credit risk is inherent in all banking transactions it is better to set limits on exposure for all such transactions and instruments. Taking into account economic cycles, interest rate movements, liquidity and other market conditions, banks should test the limits using stress testing methods and revise limits accordingly and periodically.
G. Established procedures for credit approval

Banks must establish processes which clearly guide the officers as to the eligibility of bankable activities and borrowers, information needed to evaluate the risk, different tiers of approving authorities depending upon the loan size, risk mitigation measures like obtaining securities verification of title to the securities, valuation of securities, and turn around time to indicate approval and periodicity of review of the health of the accounts. This process must be established not only for approving new credits but also for renewal and extension of existing credits.

Sanction or approval of a loan involves many persons. Persons from marketing who originate the business, persons from credit appraisal or analysis and persons who approve the loan are all involved in granting the credit. The responsibilities of each of the functionaries could be differently defined and assigned by the bank. It is therefore necessary for the bank to establish procedures that coordinate the efforts of all of the various personnel from different functional areas to ensure that sound credit decisions are made.

Information could be interpreted by individuals differently. In order to have uniformity and continuity of processing the information uniformly and to maintain a sound credit portfolio, a bank must have an established formal written evaluation and approval process for the granting loans and other credits. Approval of loans should be made only in accordance with such written guidelines.

It is not expected that everybody will know everything. Therefore banks, should establish specialist credit oriented groups to analyze and approve loans related to specific product lines, types of loans or industrial sectors. (For example a specialist in leather technology could assess the loan request of a borrower relating to leather tanning and manufacture or electrical engineer the requirements of power plant).

Banks can vest with authority, to grant loans and credit or approve changes in credit terms to different levels of management personal in a hierarchy. Normally such delegation of authority is given using a combination of individual signature authority, joint authorizations, and credit approval committees, depending upon the size and nature and complexity of the credit. In granting such authority, necessary expertise and experience of the individuals involved should be ensured. The grant of loans should be
with in such delegated authority limits.

Authority with out responsibility is anathema to management. Therefore bank should establish clear lines of accountability for decisions taken at different stages of credit approval process.

In order to ensure that the laid down guidelines are followed, there should be clear documentation of the approval process identifying the persons or committee which analyzed the credit request, provided the inputs to the approving authority and the approving authority that made the credit decision. This will form an audit trail and help to find out deviations, if any, made in the credit approval process.

Banks should invest in adequate credit decision making resources like recruitment of specialist officers, special training for credit functions, supportive mechanisms like memberships in industrial associations, obtaining periodic industrial surveys, to learn about industry trends, employing external agencies for credit rating or verification of borrowers to enable sound credit decisions consistent with their credit risk management strategy to competitively manage time delays and pressures on credit processing.

Each credit proposal should be analyzed carefully by a credit analyst with a background of knowledge and expertise and experience, commensurate with the size and complexity of the transaction. For this purpose Banks must develop and train a group of experienced officers who should be responsible to exercise prudent judgment in taking credit risks.

**H. Arms length Relationship**

Every loan granted and renewal of such credit should be made subject to the criteria and processes established and approved by Board of directors. The reason behind well designed guidelines is that they create a system of checks and balances and promote sound credit decisions and risk management. Therefore, every stake holder of the bank namely directors, senior management and shareholders should respect them and not attempt to circumvent or override the established policies and procedure for approval and monitoring of loans.

One of the cardinal principles that banks must ensure is that any extensions of credit must be made on an arm’s-length basis, where credit is extend to individuals and to their related companies. Such credits must be monitored with particular care and other
appropriate steps taken to control or mitigate the risks of connected lending.

To ensure that an arm’s length relationship is maintained in related accounts and controls are implemented, the bank’s credit criteria should not be altered to accommodate related companies and individuals. It is necessary to stipulate that the related loans are not approved on more favorable terms and conditions of than that of non-related borrowers under similar circumstances. Imposing strict exposure limits on loans to related accounts and public disclosure of the terms of credits granted to related parties are other methods of ensuring the distance. Any significant or major transaction should be brought to the notice of the board of directors and approval obtained prior to execution of such transaction. To avoid conflict of interest, any interested board member should not be a party to the decision. In the cases where large loan are given to a major share holder in addition to the board the central banking supervisory authorities must be informed.

3.2.4 Maintaining an appropriate credit administration, measurement and monitoring process

Granting of loan or a facility is the beginning of assumption of risk. To successfully mitigate and control the risk continuous monitoring of the credit is a must. There should be a system in place to ensure ongoing administration of their various credit risk-bearing portfolios. The system should include monitoring the condition of individual loans, including determining the adequacy of provisions and reserves. Banks should manage the credit risk by developing and utilizing internal risk rating systems and such risk rating should be consistent with the nature, size and complexity of a bank's business. There should be a well designed management information systems (MIS) and easy, comprehensive and well tested analytical techniques that enable management to measure the credit risk in on- and off-balance sheet items of credit and to provide information on the composition of the credit portfolio, and any concentrations of risk for monitoring the overall composition and quality of the credit portfolio. The Risk management system should consider potential future changes in economic conditions also when assessing individual credits and credit portfolios. Bank should test under stressful conditions and assess their credit risk exposures to ensure that losses and provisions are minimized.
A. Credit administration and monitoring

Credit administration plays a critical role in maintaining the safety and soundness of credit portfolio of the bank. Once a loan is granted, credit is undertaken and then to maintain, monitor and manage the risk becomes the function of credit administration. The main functions of the credit administration can be summarized as under:

- Preparing various documents such as loan agreements
- Obtaining and custody of loan documents
- Monitoring documentation, contractual requirements, and legal covenants,
- Entering limits into the computer database
- Wiring out funds
- Recording day to day operations in overdraft account including issue of cheques etc.
- Obtaining current financial information, and Keeping the credit file up to date
- Sending out renewal notices
- Periodic valuation of collateral securities given and ensure that, where applicable, collateral provides adequate coverage to the loan given
- Ensuring that securities are insured and insurance is kept valid
- Provide accurate and timely information to management information systems
- Ensure compliance with credit policies and procedures as well as applicable laws and regulations
- Monitor the use of approved credit lines by customers
- Monitoring projected cash flows on major loans are realized to debt servicing
- Identifying and classifying potential problem credits on a timely basis.

Due to the multiple responsibilities the organizational structure of credit administration function, varies with the size and sophistication of the bank. If a few individuals handle several of the functions it should be ensured that they report to authorities independent of credit marketing or approval functions. As in the case of loan approval process the entire functions should be clearly defined and written policies must be put in place.

The loan review function is part of the credit administration and should determine that the credit files are complete and that all loan approvals and other necessary documents have been obtained (current financial statements, financial analyses and internal ratings,
internal memoranda, reference letters, and appraisals etc.).

The loan review should use defined procedures and criteria for identifying and reporting potential problem credits and other exception transactions. Such transaction must be monitored more frequently and as possible corrective action, classification and/or provisioning should be initiated.

It is essential that senior management understand and demonstrate that the importance of credit administration in monitoring and controlling credit risk is recognized. Similarly specific functions of ensuring credit quality and monitoring must be assigned to specific individuals and for non performance accountability must be ensured.

**B. Measuring risk by Internal risk rating of borrowers:**

Banks must make you of an internal rating system to assess the quality of the risk. Banks should develop the rating system consistent with their size and complexities of their loan portfolio. Risk rating is an important tool to differentiate the degree of credit risk and measure not only the individual loans to borrowers, but also to measure the credit portfolio as a whole. Risk rating helps the bank in monitoring and controlling credit risk by facilitating early identification of deterioration in credit quality. A well designed rating system can rate the riskiness of the borrower or the risks associated with a specific transaction, or both and will help the bank to accurately determine the

1. Overall characteristics of the credit portfolio
2. Loan concentrations in borrower groups or sectors
3. Relative credit risk of the borrower or the activity
4. Problem credits and non performing loans
5. Adequacy of loan loss provisioning
6. Capital requirements and internal allocation
7. Pricing of loans
8. Profitability of transactions and relationship.
9. Changes to credit strategy if necessary

Banks should review the ratings periodically and rate afresh the borrowers and transactions in the light of changes in conditions and availability of latest inputs like
financial statements policy changes, economic conditions. Etc. In order to maintain consistent and accurate reflection the quality of loans and portfolio, the ratings must be done loan review persons who are independent of credit marketing and credit appraisal. They also need to be confirmed again if credit approving persons assign the ratings or by higher authorities in the credit approval chain.

Banks must establish Management Information systems to capture data on risk and use analytical tools to interpret the same. The information on risk must cover both funded and non-funded (on balance sheet and off balance sheet transactions).

Management Information systems on risk should be capable of forewarn the quality deterioration of loans.

Banks must have specific methodologies to measure risk. Risk measurement should be periodic, data based and validated appropriately. While measuring the credit quality loans to individuals or portfolio banks must consider

1. Specific nature of the credit (loan, derivative, facility, etc)
2. Contractual and financial conditions (maturity, reference rate, etc.
3. Exposure levels and changes in exposures
4. Existence of collateral
5. Internal risk rating

Banks normally monitor individual loans more closely. But to manage the overall credit portfolio banks must put in place systems to measure and monitor composition and quality of various loan types as portfolios in a consolidated way.

**C. Concentrating on concentrations of risk**

One of the major causes for problems in management of credit risk is the credit concentration.

Concentration is set occur when high proportion of the credit portfolio or significant number of loans similar risk characteristics. This happens when direct (fund based) or indirect (non fund based) credit is given to either a single borrower or a single group or a single industry or sector of the economy or to a single region or a foreign country or a group of countries with related economies. Concentration can also happen due to lending a particular type of credit facility or of accepting a particular security for loans or due to loans with same maturity.
To illustrate, if the bank’s overall credit portfolio contains more loans to real estate sector, say 10% of portfolio, then there is sectoral concentration. If the bank has extended loans say around 5% of its total lending either to single company or a group of companies then there is concentration of credit.

If the bank has issued maximum number of guarantees for imports from say Argentina or extended loans for export to Argentina, then there is a geographic concentration.

Concentrations pose a serious risk to the stability of the bank in times of adverse changes in the areas in which credit is concentrated. If there is a slump in the real estate sector then in our example 10% of the loan portfolio will be under stress and become risky.

Banks many times allow certain level of concentration in their portfolio for reasons like

1. Bank’s business thrust (say house finance bank)
2. Geographic location of branches (all branches situated with in a single state)
3. Lack of access to economically diverse borrowers
4. Expertise in a particular industry or economic sector.
5. Lack of expertise in different types of credit

While banks need to diversify their portfolio, they can not also miss out on sound credit opportunities. Therefore banks should constantly review their portfolio and stipulate acceptable concentration levels and introduce measures like higher pricing for the additional risk, increasing capital, using mechanisms such as loan sales, credit derivatives, securitization programs. Banks should have clearly defined policies and procedures, as well as adequate controls, in place to manage concentration risk.

D. Portfolio testing

Risk means uncertainty. In managing risk this fact shall be kept in mind. A sound credit risk management system should analyze what could potentially go wrong with either individual loans or various credit portfolios. This information should be factored into any analysis regarding adequacy of capital and provisions. Scenario analysis “What if” and stress testing exercises will help to identify potential credit risk exposures problems and correlation of various risks, especially credit, market risk and liquidity. Economic or industry down turns, market related events including regulatory changes and liquidity constraints are main areas of such testing. The testing results must be reviewed and if necessary policy changes must be initiated by the bank and contingency plans for
risk mitigation drawn.

3.2.5 Ensuring adequate controls over credit risk

Internal Controls must be established to ensure that approval of credit is being properly managed and that credit exposures are within approved levels and consistent with prudential standards and internal limits laid down by the board. The internal controls must facilitate enforcement of credit policy and detect any exceptions to policies, procedures and limits. There shall be a proper reporting system in a timely manner to the appropriate level of management.

The strength of a chain is the strength of its weakest link. However elaborate and comprehensive guidelines are put in place, the desired result would be achieved only when they are implemented both in letter and spirit. If the implementer of a process is the same person who monitors the implementation also, then very purpose of monitoring will be lost. Similarly if a laxity comes to light very late to the notice of the bank, it may be too late to remedy or control the risk arising out of it. Therefore banks should establish a system of independent, ongoing credit review. The findings of the review and any action taken on the review should be communicated directly senior management and, if need be, to the board of directors.

Despite all assessment, control and monitoring there will be some loans which will prove difficult of recovery for various reasons in banking. Banks must have a system in place for managing problem loans credits and various other workout situations like compromise, debt restructuring and settlements. Here again the board should lay down detailed guidelines, control mechanism and authority levels for granting such concession to account which are difficult to recover.

Banks have branches and different levels of controlling organizational structures like regional office, zonal office and Head office. Therefore, many persons have the authority to grant loans. Because of this, an efficient internal review and reporting system is needed to effectively manage the bank’s various portfolios and also at different locations. Status of the credit portfolio and performance of account officers should be made known to the senior management and board of directors for evaluation. The system should provide sufficient information for evaluation.

Internal credit reviews should be conducted by persons who are not involved in
credit marketing or appraisal. Such an independent review will provide an accurate assessment of quality of loans, compliance with guidelines, accuracy of internal risk ratings and monitoring effectiveness and help to evaluate the overall credit administration process. The reporting line for the internal review would be senior management without lending authority, audit committee and board of directors. Internal audits of the credit risk processes should be conducted on a periodic basis. The purpose of such audits would be to determine that credit risk management system functions in compliance with bank’s credit policies and procedures and within the guidelines established. Audits also help to identify any weakness in the credit administration process, policies and procedures and any exceptions to policies, procedures and limits.

As problem credits are a natural fall out of granting credit, the risk management system should provide guidelines for handling problem credits and various other workout situations by way of early identification of weakness and options available for improving the credit. The functional set up to handle problem loans must be clearly defined as to who will manage the stressed loans. Additional resources, expertise, and focused efforts will normally improve collection results.

3.2.6 Role of supervisor of the banking system.

Basel Committee on Banking Supervision emphasizes that role of the supervisor (i.e., Central Bank of the country) is vital for success of risk management in banks. According to BCBS Central banks should insist that banks under their control install and have an effective system in place to identify measure, monitor and control credit risk. They should also set prudential limits of loan exposure to borrowers and their related companies in the group restricting bank funds to avoid loss for bank as whole, on failure of any individual or group. Central banks should conduct an independent evaluation of bank’s strategies, policies, practices and procedures related to the granting of credit and the ongoing management of the portfolio. Central bank should set prudential limits to restrict over enthusiastic lending by banks.

Central banks should assess the systems in place for to identify, measure, monitor and control credit risk in each bank. Such assessment should include measurement tools (such as internal risk ratings and credit risk models) used by the banks and the role of
board of directors in overseeing the risk management system. The assessment by the central bank to evaluate the quality of credit risk management systems of banks will include

1. Testing the soundness of asset valuation procedures
2. Conducting a review of the quality of a sample of individual loans
3. Examining the Internal reviews and bank’s own validation process
4. Examining any reviews conducted by the bank’s external auditors, where available.
5. Verifying whether the bank recognizes problem credits at an early stage and takes the appropriate actions
6. Independently assessing whether the capital of the bank, in addition to its provisions and reserves, is adequate to the level of credit risk undertaken by the bank
7. Imposing certain reporting requirements for credits of a particular type or exceeding certain established levels
8. Setting prudential limits for individual and groups and sectors

It is the board of directors and the senior management of a bank who are solely responsible for the effective system of credit risk management and quality of credit portfolio of the bank. Still the Central bank as the banking authority of the country has a moral duty to ensure that the banking system is protected and managed well. After evaluating the credit risk management system of a bank, the central bank supervisors should discuss with the management of the bank any weaknesses detected in the system, excess concentrations, the classification of problem loans and any additional provisions required and its impact on bank’s profitability. They should also ensure that the bank takes appropriate actions to improve its credit risk management system by remedying the shortcomings noticed by the central bank.