# Credit Operations & Management

**THE INSTITUTE OF BANKERS, BANGLADESH (IBB)**
DR Tower (12th Floor), 65/2/2 Bir Protik Gazi Golam Dostogir Road, (Box Culvert Road) Purana Paltan, Dhaka-1000
Phone: 02-55112857-60, Fax : (8802) 55112856, E-mail : ibb.diploma@gmail.com
Web : www.ibb.org.bd & www.online.ibb.org.bd

# Reading Material on
# Credit Operations and Management (COM)


**<u>Written, Compiled and Edited by</u>**

**Mr. Md. Ali Hossain Prodhania**
Supernumerary Professor, BIBM
Former Managing Director
Bangladesh Krishi Bank

and

**Mr. Md. Nehal Ahmed**
Professor and Director (Dhaka School of Bank Management)
Bangladesh Institute of Bank Management (BIBM)



April 15, 2023

## Foreword

The Institute Of Bankers, Bangladesh (IBB), established in 1973, has been working for developing the professional skills of the employees of all Banks and Financial Institutions operating in Bangladesh. In this regard, IBB conducts the Banking Professional examination, JAIBB (Junior associate of the Institute Of Bankers, Bangladesh) and AIBB (Associate of the Institute Of Bankers, Bangladesh) usually held twice in a year throughout the country.

The examinations are being conducted under standard syllabus covering various aspects of Banking profession. As banking is ever-evolving discipline, the syllabus for banking Professional examination is also required to be matched with the changing banking conditions. For the same purpose, A committee was formed under the leadership of Dr. Toufic Ahmad Choudhury former Director General, BIBM and comprising of Mr. Md. Ali Hossain Prodhania, Former Managing Director, Bangladesh Krishi Bank, Mr. Abul Kashem Md. Shirin, Managing Director & CEO, Dutch-Bangla Bank Ltd., Dr. Mohammad Haider Ali Miah, Former Managing Director & CEO, EXIM Bank of Bangladesh Ltd., Dr. Shah Md. Ahsan Habib, Professor, BIBM, Mr. Alamgir Morshed, CEO, IDCOL, Mr. Omar Faruque , CFCC Head, Standard Chartered Bank and Laila Bilkis Ara, Secretary General, IBB for updating and upgrading the syllabus of IBB Banking Professional examination.

The committee did the splendid job of formulating the new syllabus for both JAIBB and AIBB, which was later approved by the Syllabus and Examination Committee and Council Chairman of the institute (Honorable Governor, Bangladesh Bank). The same committee has also been entrusted to formulate standard reading materials by the subject matter specialists and practitioners under their (committee members) guidance in order to facilitate the examinees for consulting focused reading materials instead of so many (sometimes also irrelevant) books. This particular reading material on **Credit Operations and Management (COM)** has been prepared and compiled by Mr. Md. Ali Hossain Prodhania and Mr. Md. Nehal Ahmed. We extend our gratitude and thanks to them for taking the trouble of writing the reading material.

All the reading materials of both JAIBB and AIBB will be gradually uploaded in the IBB e-library Web portal. The examinees/readers/users are requested to send their opinion/ suggestion on any reading material and we will consider their opinion with great importance. Besides, the IBB will modify/update the reading materials from time to time as per the requirements of the examinees.

Finally, the Institute Of Bankers, Bangladesh takes this opportunity to express its gratitude to the learned members of IBB Council, the syllabus and examination review committee and reading material preparation committee for preparing syllabus and reading materials for IBB Professional examinations.

Laila Bilkis Ara
Secretary General, IBB

# Table of Contents

# Module – A
# Introduction of Loans and Advances

## 1.1 Introduction

Banks are financial intermediary whose major functions are collecting deposit and providing credit. Particularly, bank credit promotes economic development of a country by ensuring adequate supply of fund for productive activities of entrepreneurs. The economy of Bangladesh largely depends on bank for financing economic activities. Therefore, bank credit is crucial for promoting growth and employment in Bangladesh.

Credit is one of the two core functions of any commercial bank. Credit is also the single largest source of earning of all major banks. However, only giving a lot of credit will neither serve the purpose of the economy nor that of the bank. It is only good credit for economically viable productive activities that will serve the purpose. It is even better not to sanction any credit rather than sanctioning a bad credit. Excessive bank credit for unproductive or speculative activities may bring disaster for the economy as well as for the bank.

**History of Bank Credit**

The word credit is derived from the Latin word "Credo", meaning I believe. Credit is usually defined as one's ability to buy with a promise to pay. From the banker's point of view, credit is the confidence of the lender on the ability and willingness of the borrower to repay the debt as per schedule of repayment.

The roots of lending can be traced back to the roots of civilization itself. Written loan contracts from Mesopotamia that are more than 3,000 years old showed the development of a credit system that included the concept of interest. According to Dr. Niall Ferguson, Professor of International History at Harvard University, "civilization has long had an ambiguous attitude toward lending and interest."

The Roman Catholic Church frowned upon the taking of interest during the 13th through 18th centuries in Europe, when finance underwent its greatest dynamism. However, it is known that the mathematics of compound interest originated in the Middle East.

The word "finance" comes from Old French and shares a common root with the word "finish". It was used in the 14th century, according to scholars, to imply a final settlement, and referred to metaphorically in medieval poems which described life itself as a loan from God, and death as its final repayment. French theologians considered lenders as "sellers of

time" that acted contrary to natural law. For almost a millennium, loans were considered unholy leaps into the fourth dimension that were contrary to divine plan.
Indentured loan, used in Europe from the Middle Ages through the 1800’s, was a mechanism that allowed the landed gentry and rich tradesmen to borrow money for the purchase of land or a house. In return for the necessary finances, the lender would be expected to work off their debt by working on the lender's estate. When you think about it, indentured loans are a convenient way for both parties to get what they needed. But, some unscrupulous lenders over-inflated the debt or interest payments, resulting in the borrower effectively becoming a slave.

Fortunately, there were lenders out there who recognized the value of repeat custom and were practicing an early form of sustainable lending at the same time as indentured loans were thriving. Early Italian pioneers were setting up stalls in local markets from which they would lend money. An interest rate was applied to the loan and the borrower was expected to pay back the outstanding monies at set intervals. The only problem with this type of loan was the wild variation in interest rates which were set by each lender and not controlled by a central authority.

Money lending is now considered as the heart of banking activities and is subject to far greater controls. In most countries, a central bank or financial authority regulates money lenders and the chances of losing your kneecaps to a loan shark are only slight. One of the more sensible controls placed on banks and lending is the amount that can be loaned to an individual. In days gone by there was no limit and you can probably guess the problems some people ran into as they tried to service huge debts.

Banking sector of Bangladesh is passing a very critical time. Some banks are over-burdened with huge amount of bad or non-performing credit. High non-performing credit requires more loan loss provision, more monitoring, supervision and legal expenses. These provisions and expenses are eating up banks’ profit and threatening their capital adequacy. These banks are posing threat not only to their going concern but also to financial stability of the banking industry of the country. Large amount of non-performing loans of banks are the outcome of the unsound credit practices of the banking industry. These unsound credit practices include compromised lending to related parties, information asymmetry problem and wrong borrower selection, credit related frauds, ambitious short-term credit target, name lending, credit concentration, large loan, incapacity or reluctance of the bank officials to understand ability and willingness of the borrowers, inappropriate credit structuring, improper valuation of security, incomplete credit documentation, lack of monitoring, etc.

Like every other business activity, banks are driven by profit motive. A bank invests its funds in many ways to earn income. The bulk of its income is derived from loans and advances.

The business of lending is not without certain inherent risks. A banker cannot afford to take undue risk in lending. Banks lend mostly depositors' money. Credit/Loanable funds having cost implications and repayment obligations to the depositors have to be managed efficiently with minimum possible credit risk. Prudent management of this risk is fundamental to the sustainability of a bank. Credit risk is the possibility that a borrower or counter party will fail to pay interest or repay the principal according to the terms specified in a credit agreement. Credit risk means that payments may be delayed or ultimately not paid at all, which can, in turn, cause cash flow problems and affect a bank's liquidity. Banks make loans and advances to traders, businessmen, agriculturists and industrialists. In either case, the banks run the risk of default in repayment. Therefore, banks have to follow cautious policy and sound lending principles in the matter of lending. Traditionally, banks have been following three cardinal principles of lending viz. safety, liquidity and profitability.

There is hardly any alternative available for the banks than coming back to sound credit practices. Sound credit practices will not only help the banks themselves, but also help ensuring financial stability in the banking sector. This manual is an endeavor to capture the sound practices or best practices related to the credit operations of a bank.

## 1.2 Types of Borrowers and Loans & Advances

Credit is usually defined as one's ability to buy with a promise to pay i.e. credit is the system by which goods and services are provided in return for deferred payment rather than immediate payment. Credit may be provided by the seller or by a bank or finance company. The making of loans and advances has always been prominent and profitable function of a bank. Loans and advances by commercial banks are made in different forms such as loans, overdrafts, cash credit, bill purchased etc.

### 1.2.1 Types of Borrowers

- Individuals: (Under retail Segments): Retail traders, Micro, Small and Medium Enterprises, Farmers, Agricultural, Consumers, Home loan, Credit Card etc.
- Proprietorship Firms.
- Partnership Firms.
- Private Limited Companies.
- Public Limited Companies.
- Large Corporates.

- Government Entities. (SOEs).

### 1.2.2 Types of Credit Facility

Commercial banks make loans and advances in different forms. All types of credit facilities can be broadly classified into two groups:

- Funded credit
- Non-funded credit

**Funded Credit**

Any type of credit facility, which involve direct outflow of bank fund is termed as funded credit facility. Funded credit facilities may be classified into four major types:

- ***Loan:*** When credit facilities are made in a lump sum which is repayable either in fixed monthly installments or in lump sum. It is allowed for a specified purpose to those parties who have either fixed source of income or who desire to pay it in lump sum. The loans are granted for short, medium, and long period. Short-term loans are usually granted to meet the working capital requirement of the borrower. Medium-term loans are repayable over a period of 2 to 5 years and are granted for the purpose of business expansion such as expansion/construction of factory, purchase and installation of capital machinery etc. and also durable goods like vehicles, equipment. Long-term loans are generally termed as "Term loan".Bank generally extends term loans for a period of five years and above for meeting the requirement of capital investment.

- ***Cash Credit:***Cash credit is the favorite mode of borrowing by traders, industrialists, agriculturalists etc. for meeting their working capital requirement. Working capital requirement is an elastic form of borrowing. It is elastic because the limits fluctuate according to the needs of the business of the borrower. There are two types of cash credit:
  - ✓ ***Cash Credit Pledge*****:** This type of facility is provided against pledge of goods, products, merchandise which remain in the godown under the possession of the bank with effective control but ownership remains with the borrower.
  - ✓ ***Cash Credit Hypothecation*****:** Cash Credit is sometimes allowed against hypothecation of goods. It is called cash credit hypothecation. For example, in a manufacturing company whose stocks of raw materials and manufactured goods constantly fluctuate, it is difficult for the bankers to control such changes. In case of hypothecation both ownership and possession remain with the borrower although by

virtue of the hypothecation agreement the bank can take possession of the goods if the borrower defaults.

- ***Overdraft:***The overdraft is a kind of advance allowed on a current account operated upon by cheques. The customer may be sanctioned with a certain limit upon which he can overdraw i.e. withdraw his current account beyond his/her deposited amount (but not exceeding certain limit) within a stipulated period. Here withdrawals or deposits can be made any number of times at the convenience of the borrower, provided that the total amount overdrawn does not, at any time, exceed the agreed limit.

- ***Bill Purchase and Discount:***Discounting and Purchasing of bill of exchange is another way of employing the banks fund. Bank allows advances to the clients by purchasing or discounting export bills. In this method, the bank calculates and realizes the interest at a prefixed rate and credits the amount after deducting the interest from the amount of instrument. In this case bank becomes the purchaser or owner of the bill, which is treated as security for advance. In case of purchase of bill, the charges are less because the bank can collect the payment immediately.

- ***Other Important Funded Facilities are:***
  - ✓ Consumer Credit
  - ✓ SME Credit
  - ✓ Syndicated Loan
  - ✓ Lease Financing

**Non-funded Credit Facilities**

Non-funded credit facilities do not require fund involvement directly. Though these types of credit facilities are primarily non-funded in nature but at times it may turn into funded facilities. As such liabilities against these types of credit facilities are termed as "contingent liability". The major non-funded facilities are:

- ***Letter of Credit***: Letter of credit is an undertaking issued by a bank on behalf of it's customer for availing credit facility from the beneficiary. A letter of credit is issued at the request of the client (the buyer) guaranteeing the payment to the beneficiary (the seller) against shipment of goods.

- ***Bank Guarantee (Bid Bond):*** One kind of bank guarantee issued by the bank on behalf of its clients (Mostly contractor) to enable him to submit his bid in a tender. For issuing bid bond bank usually obtain cash margin and counter guarantee from the clients.

- ***Bank Guarantee (Performance Bond):*** A bond or guarantee issued by a bank on behalf of the client guaranteeing that the client will perform as per the contract or the bank will compensate the loss that might incur because of the non-performance of the client. Bank while issuing such bond takes certain cash margin and counter indemnity from the client to secure his position.

- ***Deferred /Payment Guarantee:*** Importer of capital goods like plant, equipment may find it difficult to pay the full price of the goods immediately on their receipt. Therefore the supplier of the capital goods extends deferred payment credit terms. Deferred payments guarantee issued by a well-known bank is one of the acceptable securities to the suppliers by the buyer.

- ***Bank Guarantee (Custom and Excise Guarantee)***: This guarantee is issued by the bank on behalf of their clients in favor of the custom authority to make payment on account of their custom duties/excise duties on imported goods or export of commodities on future date.

## 1.3 Banker-Customer Relationship

The relationship between a banker and a customer depends on the type of transaction. In this banker and customer relationship, both parties have some obligations and rights. The relationship between banker and customer is not only that of a debtor and creditor. However, they also share other relationships.The term banking may be defined as accepting a deposit of money from the public for lending or investing investment of that money that is repayable on demand or otherwise and with a draw by cheque, draft, or order.

**Banker:**A banker is dealing in the field of banking which is highly dynamic, complex and sophisticated and which must cater to the ever-growing requirements of all the people of society. The banks have diversified their activities on an accelerated pace to cater to the sophisticated needs of corporate clients and other segments of trade and industry. Hence, the banking terminology seems to be the most incomprehensible one. Still, some attempts have been made to define the term 'banker'.

'Banker' means a person transacting the business of accepting, for the purposes of lending or investment, of deposits of money from the public, repayable on demand or otherwise andwithdrawable by cheque, draft, order or otherwise, and includes any post office savings bank (Sec.3B of NI Act 1881).

**Features of Banking**

- The definition of banking describes the following features of banking.
    - ✓ A banking company must perform both of the essential functions.
    - ✓ Accepting of deposit.
- Lending or investing the same: The phrase deposit of money from the public is significant. The bankers accept a deposit of money and not of anything else. The world public implies that a banker accepts a deposit from anyone who offers his/her money for such a purpose.
- The definition also implied the time and made to withdraw the deposit. The deposit money should be repayable to the depositor on demand made by the letter or according to the agreement between the two parties

**Customer:**It is equally difficult to define the term ‘customer’. Different views have been expressed at different times. Even under the Negotiable Instruments Act, 1881, the term ‘customer’ is not defined though it has been used in section 131. But this term, ‘customer’ is of much significance to a collecting banker because he can get protection under Sec. 131 of the Negotiable Instruments Act only if he collects a crossed cheque for his customer in good faith and without negligence. Thus, to solve many of the disputes that may arise in banking transactions, a clear-cut definition of the term, customer is essential. Who is then a customer?

A person who has a bank account in his name and the banker undertakes to provide the facilities as a banker is considered a customer.To constitute a customer, the following requirements must be fulfilled-

- The bank account may be savings, current or fixed deposit must be operated in his name by making a necessary deposit of money.
- The dealing between the banker and customer must be of the nature of the banking business. The general relationship between banker and customer:

**Relationship between Customer and Bank**

Relationship between banks and their clients is fiduciary one. It is based on trust. Hence, bank has to carry out their duties to the customer in utmost good faith and due diligence. Bank's supreme responsibility lies in protecting customers deposit and secrecy about customers. Banks shall be impartial and non-discriminatory in their dealings with the customers. Any favor or indulgence to any one client or group of clients will be considered violation of fiduciary relationship.

Any dispute between two parties can be settled only on the basis of the nature of the existing relationship between the two. Hence, it is imperative that one should know the exact relationship between the banker and the customer. This relationship falls under two broad categories, namely: (i) general relationship; and (ii) special relationship.

**Types of Relationship between a Banker and a Customer**

The relationship between banker and Customer are categorized as follows:

1. Debtor and Creditor
2. Principal and Agent
3. Trustee and Beneficiary
4. Bailor and Bailee
5. Lessor and lessee
6. Other special relationships with the customer, obligations of a banker

**Debtor and Creditor:** When a banker receives deposits from a customer, he is technically said to borrow money from the customer. So, he is acting as a debtor who is bound to return the money on demand to his creditor namely his customer.

But in the cases of a loan, cash credit and overdraft, the banker becomes a creditor and the customer assumes the role of a debtor.

**Principal and Agent:** When the banker collects cheques, bills, dividend warrants, pays insurance premium, subscriptions etc. on behalf of his customer then the agent – principal relationship exists between a banker and his customer.

**Trustee and Beneficiary:** A banker becomes a trustee only under certain circumstances, for example, when a cheque is given for collection, till the proceeds are collected, he holds the cheque as a trustee.

**Bailor and Bailee:** A banker becomes a bailee when he receives gold ornaments and important
documents for safe custody. A banker does not allow any interest on these articles.

**Lessor and lessee:** A banker become a lessor when he allows a safe deposit locker. It is only the customer who has to pay rent for the lockers.

**Special Relationship with Customer/Obligation of Banker:** The primary relationship between a banker and his customer is a debtor and a creditor or vice versa. The special features of this relationship, as a note above, impose the following additional obligations on the banker.

- The obligation to honour the Check/Cheques
- The deposit accepted by a banker is his liabilities repayable on demand or otherwise. Therefore, the banker is under a statutory obligation to honour his customer's check/cheque in the usual course.
- According tosection 31 of the negotiable instruments. Act 1881, the banker is bound to honour his customer's check/cheque provided by following conditions are fulfilled:
  - ✓ Availability of sufficient funds of the customer.
  - ✓ The correctness of the check/cheque.
  - ✓ Proper presentation of the check/cheque.
  - ✓ A reasonable time for collection.
  - ✓ Proper drawing of the check/cheque.
- The obligation to maintain the secrecy of the customer accounts:The banker is obligated to take the utmost care in keeping secrecy about his customer's account.By keeping secrecy is that the account books of the bank will not be thrown open to the public or government officials if the following reasonable situation does not occur,
  - ✓ Discloser of information required by law.
  - ✓ Discloser permitted by bankers' practice and wages. The practice and wages are customary amongst bankers to permit disclosure of certain information and the following circumstances.
    - ➢ With express or implied consent of the customer.
    - ➢ Banker reference.
    - ➢ Duty to the public to disclose.

## 1.4 Credit Planning

Credit planning determines how credit should be granted in the future in order to achieve the predetermined credit objectives according to the mandate of the bank and macro-economic priorities of the Government and regulator considering financial condition of the institution, financial market scenario and competitiveness with peer group.

**Factors Influencing Credit Planning**

- Mandate of the bank.
- Government and regulatory priorities.
- Conditions of both Money Market and Capital Market.
- Performance scenario of the homogeneous products in the market.
- Cost of Credit (Loan pricing).
- Risk assessment from historical data based on types of credit.
- Collaterals accepted by the bank.
- Tenure of the loan and repayment procedure.
- Geographical concentration.

### 1.4.1 Credit Planning at the Bank Level

Credit planning at bank level implies estimating total loanable fund that are likely to be available within the given period and then allocating the same amongst various alternatives uses in conformity with the guidelines issued by the central bank and priorities. Credit planning activities of a bank is important for achieving the following objectives: *one*, maximization of profit; *two*, diversification of credit portfolio; *three,* ensuring the best alternative use of fund; *four*, providing credit to right person at right time at right quantity; and *five*, compliance with regulatory limits and priority.Bank level credit plan should be made by giving due consideration of the following points.

- Government priority set in the 5-year plan
- Government priority set in the national budget
- National level credit growth target set in monetary policy
- Industrial policy
- Export and Import policy
- Bank’s profit target
- Bank’s deposit growth plan

- Bank’s current portfolio structure
- Prudential regulations
- Regional and sectorial imbalances

Due consideration on the above-mentioned points or documents will help bank management to understand the regulatory limits, incentives, government priority, policy and limits. As such bank will be able to formulate plan in line with national priority and regulatory limits. An indicative summary format for bank level credit planning is given in Table-1.1

**Table-1.1: Indicative Planning Sheet: Credit Planning**

| | Loan provided during the year | | | | Additional loans required to existing units inbudget year | | Estimated loans required to new units during budget year | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Term Loan | | Demand/ Working Capital | | | | Term Loan | | Demand/ Working Capital | |
| | No of A/C | Amount | No of A/C | Amount | Term Loan | Demand/ Working Capital | No of A/C | Amount | No of A/C | Amount |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| A. Industries<br>A-1 Small<br>A-2 Medium<br>A-3 Large<br>A-4 Others | | | | | | | | | | |
| B. Agriculture<br>B-1 Crop loan<br>B-2 Dairy<br>B-3 Poultry<br>B-4 Others | | | | | | | | | | |
| C. Trading (import/export) | | | | | | | | | | |
| D. Services | | | | | | | | | | |
| E. Others | | | | | | | | | | |
| F. Total (A+B+C+D±E) | | | | | | | | | | |

### 1.4.2 Credit Planning at Regional Level or Branch Level

Credit planning at the regional or branch level usually consists of the following tasks:

- Adherence to the policy guidelines of the head office and supplementary policy guidelines prepared by the regional/zonal office on the basis of indicative regional credit plan.

- Determination and analysis of the command area of the region or branch concerned.
- Finding out the major sectors of the economy of the command area such as agriculture, small, medium and large-scale industry etc.
- Dividing the major sectors into different sub-sectors, as for example, agriculture sector may comprise cultivators, dairy, poultry, etc.
- Classification of the existing borrowers by occupation/sector wise.
- Estimation of the additional requirements of funds for the existing borrowers / loan accounts.
- Analysis of the chance of covering/financing new activities in the command area during the budget year on the basis of current environmental data.
- Careful assessment of fund required for the purposes mentioned above.
- Determination of the quantum/requirement of the incremental loanable fund.
- Allocation of the said funds to different sectors and client groups during the plan/budget period by ensuring profitability of the bank and attainment of social goals.
- An indicative summary of branch level credit planning format is given in Table-1.2

**Table-1.2: Region or Branch level Credit Planning Summary Format**

(Amount in Tk.'000)

| | Current Year Actual (December) | Budget Year | | | | |
|---|---|---|---|---|---|---|
| | | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Total |
| | | Tk. | Tk. | Tk. | Tk. | Tk. |
| A. Industries<br>A-1 Small<br>A-2 Medium<br>A-3 Large<br>A-4 Others<br>B. Agriculture<br>B-1 Crop loan<br>B-2 Dairy<br>B-3 Poultry<br>B-4 Others<br>C. Trading (import/export)<br>D. Services<br>E. Others<br>F. Total (A+B+C+D±E) | | | | | | |

## 1.5 Credit Policy

Credit policy defines the course of action or a guiding principle that influences decision of lending. A set of rules and regulations formed in line with the regulatory guidelines to minimize credit risk for the safety of the depositor’s money and to ensure sustainable earnings.

**Features of a GoodCredit Policy**

- Credit volume
- Earnings
- Asset quality
- Regulatory compliances: Priority sector lending like CMSME, Agricultural credit, Large loan concentration, Single borrower exposures, ICRR, CIB etc.
- Application procedure
- Formation of committees and set assignments
- Assessment and evaluation stages and procedures
- Loan pricing method
- Delegation of power
- Approval / Sanction of Credit.
- Maintenance of Liquidity and statutory reserves (CRR, SLR)
- Maintenance of Capital
- Documentation guidelines
- Monitoring and supervision of the Loans
- Management of Non-Performing Loans
- Legal action

## 1.6 Centralized and Decentralized Credit Operations

Securing the riskiest part of banks portfolio is crucial, especially when economic conditions are uncertain. Choosing between centralized and decentralized loan management is something that each lending institution will need to do as they grow and scale of operations. When evaluating lending practices, lending institutions may consider a centralized model for loan administration, documentation and monitoring as this can lead to greater efficiency, more bank-level uniform controls, better risk management, and, ultimately, a better customer experience. It can ensure an excellent credit portfolio. When shifting to a centralized loan administration, the burden of responsibility for tedious and time-consuming administrative duties can be shifted from Relationship Managers (RMs) and Branch to the Head Office.Management allowing them to focus on monitoring existing customer and can build relationships with new ones. Some of the benefits of centralizing loan administration stated below:

- **Improving/Developing Customer Relationships:**RMs can spend less time on other work and can manage more time in developing new business, as well as strengthening existing relationships.
- **Batter meaningful Communication:**Clients have a central point of contact for all communication regarding their loans. As it is the Head Office's sole responsibility, they will have more bandwidth to communicate with clients about their loans compared to RM/Branch who may be originating new deals.
- **Developing Core Skills & Competencies:**By designating a central Credit Management Division for all loan management and administration, the HO will develop expertise in those duties in a shorter amount of time. That way, they can focus all of their efforts on those duties compared to an RM. This will decrease employee errors and oversights during the draw process.
- **Reducing Credit Risk:**Separation of duties creates room for unbiased risk management and selection of borrowers. The RM's main priority is the customer—while this is a good thing generally, the customer relationship could cloud the RM judgment when it comes to gathering the appropriate documentation, inspecting the property, or statements from the borrower at their "word" and can result in more room for risk.
- **Increasing Skills:**Clients send draw request packages to the draw reviewer directly which can limit the amount of handoffs required in the draw process while increasing flexibility.
- **Simplifying the Approval Process:**Approval processes can also be streamlined as the draw reviewer can be in the same office as the executive approver as opposed to approval via email or phone call.
- **Improving Technology Adoption:**With a central administrative team, new processes and technology training is simplified. A single Senior Administrator can relay process changes to the team and help train team members on new technologies in one location.
- **Batter Judgment & Uniformity in Borrower Selections:** Since the credit appraisal done from a single point by a team there are batter options for unbiased selection of borrowers than many minds of RM at branch level.

## 1.7 Qualities of a Good Borrower

**Credit-worthiness:** These are basically from the landers point of view and have to do with the applicant's credit history, their capacity to pay, and in some cases, the value of their collateral. Banks in particular like to lend to people with high net worth, stable incomes, have a good loan payment history, and liquid assets that produce income or value.

**Building a solid foundation:** The quality borrower starts building relationship gradually with the lender and earned trust and confidence.

**Money Management Skills:** This includes a solid understanding of one's cash flow, the ability to live within your means, and the skill of keeping accurate and timely financial records.

**Integrity:** The big "I" means you walk your talk: if you borrow a certain sum of money, integrity means paying back the agreed sum on time.

**Prudence:** A good borrower does not bite off more than he can chew. He will only borrow what he can pay and tracks whom he borrowed from.

**Purposeful Spending:** Perhaps the best indicator of a successful loan is what you ultimately do with the extra cash: is it going to provide you with greater value, or is it just going to take more money out of your pocket? If the borrowed money spends for which it was sanctioned would eventually give a good repayment.

**Borrow Only When There is Need:** The borrower only borrows when he needs it. He never convinced to borrow at the request of lender whatever the terms and interest rate.

**Make Payments on Time:** Probably the best behavior to judge the borrower. But this is an issue of post sanction and disbursement. This the best quality for future reference.

## 1.8 Features of Different Credit Products

Bank offers various credit facilities. Based on the Funded and Non-funded concept, name of credit products and their fundamental characteristics are summarized as under:

### Features of Funded Credit Facility

| Product | Characteristics |
|---|---|
| Overdraft | • A limit is fixed for drawing excess to credit balance<br>• Allowed as working capital<br>• Repayment from regular cash flows.<br>• Continuous facility.<br>• Reviewed annually and Renewable |
| Time Loan (up to 1 year) | • Allowed for a short term/specific period on deal basis as part of working capital support.<br>• Purpose is specific for additional stocks or seasonal demand of market.<br>• Repayable in lump-sum or in installments within the tenure.<br>• Revolving limit may be allowed considering nature of business and requirement which is reviewable / renewable annually.<br>• Sometimes allowed Against Accepted Bills (IBP/ FBP) |
| Term Loan (more than 1 Year) | • Credit allowed for a period of more than 01 year.<br>• Purpose is fixed investment of the borrower like purchase of plant machinery, construction, project establishment, BMRE etc.<br>• There is an established repayment schedule (with /without moratorium) monthly or quarterly or half-yearly depending on projected cash flow. |
| BLC (Bills under LC) | • Interim (temporary) advance related to Import.<br>• Disbursed to make payment against documents of import LCs.<br>• Maximum tenor as per existing practice 21 days.<br>• Liquidated against cash payment by the importer or by creation of other credit lines.<br>• Also known as PAD (Payment Against Documents) |
| Trust Receipt (TR) | • The advance is related to Import, known as post import finance.<br>• Disbursed for retirement of import documents and release of consignments/goods.<br>• Goods are handed over to the importer on trust that sale proceeds will be deposited to liquidate the loan.<br>• Usual tenor 30/45/60/90/120/150/180 days<br>• Revolving limit may be allowed considering the nature of business and requirement of the facility of the importer. |
| Packing Credit (PC) | • Generally sanctioned to exporter against documents evidencing an export deal or transportation of goods from godown to the port of shipment.<br>• Credit is allowed for a transit period from dispatch of goods to the date of negotiation / final receipt of export bills enabling the concerned exporter to purchase / produce / process further goods for export.<br>• Credit is allowed only when the exporter holds a confirmed export LC or contract for shipment of goods.<br>• It is a short-term advance with a fixed repayment date. But the duration is not beyond 180 days. Liquidated by collection of export proceeds.<br>• Revolving limit is allowed considering the nature of business and actual need. |

| Product | Characteristics |
|---|---|
| Loans Against Commitment | • Allowed only for urgent settlement of Commitment.<br>• Repayable on demand with tenure of one day (for system application) only. |

**Features of Consumer Loan Products**

| Product Title | Purpose | Max. Tenor | Terms of Repayment |
|---|---|---|---|
| Personal Loan – Unsecured | Purchase of house hold items, Marriage, Medical/treatment, travel, CNG conversion, festival, house/office renovation and any other requirement deemed appropriate under Consumer loan. | 60 months | Through EMI |
| Auto Loan | To purchase Brand new and Recondition vehicle for family use | 60 months | Through EMI |
| Home Loan | • For purchase of apartment/ independent house within the municipal areas of different cities in Bangladesh but not more than 15 years old.<br>• For completion of construction of a new house or old house but not more than 20 years old.<br>• For house renovation.<br>• Takeover of the liability from other Bank's/Financial institution. | 20 years | Through EMI |
| Secured Over Draft | To meet financial requirement. | Revolving | Any Amount |
| Secured – Time Loan | To meet financial requirement. | Revolving | Any Amount |
| Secured – Term Loan | To meet financial requirement. | 3 years | Through EMI |

**Islamic Banking Investment Products**

| | |
|---|---|
| • Bai-Murabaha<br>• Bai-Muajjal<br>• Bai-Muajjal (TR) | • Hire-purchase under Shirkatul Melk (HPSM)<br>• Mudaraba post-Import (MPI)<br>• Quard against MTDR |

**Other Credit Related Productsand Services**

| |
|---|
| • In addition to the above, Bank offers Agency Function, Syndication Arrangement & participation, Equity Financing & Arrangement, Corporate Advisory Service etc. |

## 1.9 Indicative Questions

1. What are the types of borrowers of a bank?
2. Mention the types of credit according to CL reporting.
3. What are different types of funded credit?
4. Explain the categories of relationship between banker and customer.
5. Mention different steps to follow for an informed credit decision.
6. What are advantages of centralized credit management over decentralized credit (Branch /RM)
7. Mention qualities of a good borrower.

# Module – B
# Principles of Sound Lending and Credit Process & Investigation

## 2.1 Principles of Sound Lending

Credit is a promise of future payment in money given in exchange for present money, goods, or services. In general credit means the granting of a period of time by a creditor to a debtor at the expiration of which the latter must pay the debt due. A transaction in cash or kind with an obligation to repay at some specified time in the future is termed generally as credit or advance.

Bank credit can be categorized according to maturity, method of disbursement and repayment, origin, purpose and security. A combination of these aspects may be used for the purpose of a categorization.

Before sanctioning credit to a customer, banker should follow the general principles of good lending that involve the following aspects.

***Safety:***A bank lends what it receives from the public as deposits. Safety depends upon –

(i) the security offered by the borrower, and

(ii) the repaying capacity and willingness of the debtor to repay the loan with interest.

The banker should ensure that the security offered is adequate and readily realizable and the borrower is a person of integrity, good character and reputation.

***Liquidity:***Liquidity refers to the ability of an asset to convert into cash without loss within short time.The liabilities of a bank are repayable on demand or at a short notice.To meet the demand of the depositors in time, the bank should keep its funds in liquid state.As such a bank should confine its lending to short term against marketable securities.

***Profitability:***Banks earn profit to pay interest to depositors, declare dividend to shareholders, and meet establishment charges and other expenses.So, profit is an essential consideration. The main source of profit comes from the difference between the interest received on loans and those paid on deposit.A bank must employ its funds in such a way that they will bring adequate return for the bank.

***Productive Purpose:***Before sanctioning loans, a banker should enquire about the purpose for which it is needed. Loans for undesirable activities such as speculation and hoarding should be discouraged.Before giving financial accommodation, a banker should consider the source from which repayment is promised.

***Security:*** Security can be categorized into two types:

- Personal/Intangible Security
  - Borrower's Liability
  - Guarantee of respectable third party
- Tangible Security
  - Primary Security
  - Collateral Security

***Diversity of Advances:***The banker should not lend a major portion of his loanable funds to any single borrower or to an industry or to one particular region.An adverse change in the economy of these may affect the entire business.The bank must advance moderate sums to a large number of customers spread over a wide area and belonging to different industries.

***National Interest:***In the changing concept of banking, factors such as purpose of the advance, viability of the proposal and national interest are assuming a greater importance than security, especially in advances to agriculture, small industries, small borrowers, and export-oriented industries.

**What is Sound Lending?**

- Sound Borrowers
- Sound Business Practices
- Sound Credit Officers
- Sound Credit Standard
- Sound Regulatory Framework
- Unbiased application of Law

**How to Create Sound Lending?**

- Need to ensure prudent selection of borrower
- Need to conduct rigorous assessment
- Need to complete flawless documentation
- Need sufficient and appropriate support from all concerned authorities

## 2.2 Borrower Selection Process in Banks

Each year the head office prepares a credit budget indicating the amount of credit to be sanctioned and disbursed in different areas, categories, products and sectors. Credit committee/CRM is entrusted to sanction and disburse the budgeted amount prudently. Generally, there is a credit committee /CRM in head office of each bank which reviews every aspect of a loan proposal to be considered in approving and sanctioning loan. Relationship Management (RM) acts as a primary bank contact with a borrower. At first, the banker and the customer discuss with each other about the credit facilities offered by the bank and required by the customer. Through discussion, RM is to ensure that proposed credit is from expected business segment/sector and for permissible and expected credit facility. He also ensures that there is a scope of lending to the client. After a successful discussion, customer is to apply for credit in a prescribed format provided by the bank. After receiving loan application from the prospective borrower, RM scrutinizes the submitted information and collects all other required information from different parties including Credit Information Bureau (CIB) report.

Only sanctioning a credit will not serve the purpose of the bank. It is only good credit that will serve the purpose of the bank. It is even better not to sanction any credit rather than sanctioning a bad credit. Selection of good borrower is the starting point of the process of creation of good credit. Before sanctioning credit, a banker wants to be sure about the repayment. For ensuring loan repayment a bank can go for preventing measure or curative measure or both. But curative measures are always costlier than preventive measures in terms of both time and money. So credit investigation as a preventive measure is required for selection of good borrower. Credit investigation and selection of good borrower may substantially help a bank in the recovery of extended credit.

Borrower analysis refers to the assessment of a credit proposal from different points of view to decide whether the bank should go for finance or not, i.e. the study of the borrower specially justifying credit status of the borrower. Borrower Analysis helps the banker to ensure selection of right type of loan proposals/projects/ventures/enterprise and right type of borrower. On the basis of recommendation made in the credit proposal, the responsible credit officer will re-assess the position of the borrower and may ask for further clarification from the person who has prepared the credit proposal. If the borrower seems to be prospective, he is finally selected for disbursing credit.

Considering different aspects, banks select their borrower. The borrower selection process of a bank may vary from other banks. Bank expects that loan application from the client should be from permitted business segment and for desired types of facilities. If there is a scope for lending in this industry and to the group, then bank may appraise managerial, organizational, marketing and technical aspect of the applicant. After being satisfied, bank will collect information from different sources including CIB of Bangladesh Bank. Afterward, bank will apply different techniques on the existing and projected financial statements of the client to judge the financial feasibility. Subsequently, loan structure, price, tenure, nature, etc. will be finalized at that point where both parties agree. Bank must consider socio-economic aspect of the project before finalizing the same. If all of the aspects of the applicant are satisfactory to the bank, bank may go for documentation and making disbursement and after that applicant will be borrower. In a nutshell, the activities of credit operations start with discussion between bank and client and end with recovery of loan. Credit operations in banks may be centralized or decentralized. However, the overall activities of the credit operations of a bank are outlined in the FlowChart-2.1 whereas decision flow chart of borrower selection is presented in FlowChart-2.2.

***Origination of Credit:*** Each year the head office prepares a credit budget indicating the amount of credit to be sanctioned and disbursed in different areas, categories, products and sectors. Credit committee/CRM is entrusted to sanction and disburse the budgeted amount prudently. Generally, there is a credit committee /CRM in every region, area, division and head office of each bank which reviews every aspect of a loan proposal to be considered in approving and sanctioning loan. Relationship Management/ Marketing (RM) unit acts as a primary bank contact with a borrower. At first, the banker and the customer discuss with each other about the credit facilities offered by the bank and required by the customer. Through discussion, RM is to ensure that proposed credit is from expected business segment/sector and for permissible and expected credit facility. He also ensures that there is a scope of lending to the client. After a successful discussion, customer is to apply for credit in a prescribed format provided by the bank. After receiving loan application from the prospective borrower, RM scrutinizes the submitted information and collects all other required information from different parties including Credit Information Bureau (CIB) report.

For selecting the right type of borrower and business, credit appraisal is a must. For this purpose, RM is to conduct appraisal of managerial, organizational, marketing, technical, socio-economic and environmental aspects. Besides, the bank assesses the credit worthiness and risk profile of the borrower. By and large, this assessment covers loan proposition and purpose, borrower analysis, industry analysis, supplier/buyer analysis, historical financial analysis, projected financial performance analysis, etc. Security offered by the customer against the proposed loan should also be considered for credit decision. Moreover, bank should grade the borrower by completing Internal Credit Risk Rating Systems (ICRRS). In case of large loan, banks refer to External Credit Assessment Institution (ECAI) for credit rating according to the direction of Basel II. The assessments are mostly done based on the information collected from the borrower. Besides, market reports, study of accounts, financial statements, on line CIB, external rating and personal interview are also worked as source of inputs for decision making. In case of corporate credits where the borrower is a group of companies, banks conduct credit assessment on a consolidated or group basis. In case of loan syndication, besides the lead bank, all participatory banks also perform their own independent assessment, analysis and review of terms of the syndicate loan. On the basis of appraisal, RM recommends the application for approval to the appropriate authority mentioning amount and type of loan proposed, purpose of loan, loan structure, security arrangement, etc.

***Approval of the Loan Proposal:*** The authority to sanction/approves loans is clearly delegated to senior credit executives by the Managing Director (MD)/Chief Executive Officer (CEO) and Board of Directors (BOD). Approval authority is required to be delegated to individual executives based on the executives' knowledge and experiences. The recommending/ approving executives should take responsibility for and be held accountable for their recommendation/ approval. Delegated authority including capacity of approval must be reviewed annually and the pooling or combining of authority limits of different executives should not be permitted. Considering the size and strategy of the bank, approval function is centralized in some banks. However, approval functions are generally decentralized in zonal, divisional, and branch level. In case of centralized system, irrespective of amount, there is an approval authority in the head office level. In case of decentralized system, delegation of approval limits should be such that all proposals where the facilities are up to 15% of the bank's capital should be approved at the CRM level, facilities up to 25% of capital should be approved by CEO/ MD, facilities in excess of 25% of capital to be approved by the Executive Committee (EC)/ Board only after recommendation of CRM and MD/CEO according to the CRM guideline. In addition, a monthly summary of Zonal Credit Officer (ZCO) approvals is sent to Head of Corporate Banking (HOCB)/Head of SME (HOSME)/ Head of Consumer

Credit (HOCC). The head office supposes to review at least 10% of ZCO approvals to ensure adherence to lending guidelines and bank policies. Approval authority may approve or decline the recommended proposal. Approval process more or less uses the following line of approval (Flow-Chart 3) depending on the loan amount and internal policy of the bank. Before approval, the Head of CRM forward the loan proposal to Risk management Unit (RMU) for their observation regarding risk. After getting observations from RMU, the Head of CRM process for approval. Following due process, the loan proposal will be approved/ rejected and send back to RM.

***Documentation and Disbursement of Credit:*** Getting the approval for the loan proposal, RM makes two copies of the proposal and sends one copy to RMU and the other to Credit Administration Department (CAD) for documentation. Then, CAD issues sanction /offer letter to the customer through RM. Customer should agree with the terms and conditions incorporated in the offer letter. Subsequently, RM completes the Loan Documentation Check List (LDCL) and forwards the acceptance to CAD. A typical CAD performs the activities relating to disbursement, custodian, monitoring and compliance. Main responsibilities of CAD are: ensuring that all security documentations comply with the terms of approval and are enforceable, examining insurance coverage to ensure appropriate coverage in place over assets pledged as collateral, and is properly assigned to the bank, disbursing loan only after all terms and conditions of approval have been met, and all security documentations are in place; maintaining control over all security documentations and monitoring borrower's compliance with covenants and agreed terms and conditions. After ensuring full compliance, CAD takes necessary steps for disbursement of the loan amount.

***Monitoring and Follow-up of Credit:*** After disbursement, RM regularly follows-up the credit. Monitoring unit under CAD alongside of zonal office monitors credit based on due-date-diary. Identification of early alert account and reporting the same to CRM are responsibility of RM. Through close monitoring, the quality of early alert account may improve but conversion of this account to regular account status is under the discretion of CRM. As per credit policy, RM is to classify the accounts and maintain required provisions.

***Recovery of Credit:*** There is a separate Recovery Unit (RU) in each bank as per CRM manual. This unit should directly manage accounts with continuous deterioration. Its primary responsibilities are to determine recovery strategy, pursue all options to maximize recovery, ensure adequate and timely loan loss provisioning, etc. The management of Non-Performing

Loan (NPL) must be a dynamic process, and the associated strategy together with the adequacy of provisions should be reviewed regularly. All NPLs should be assigned to an Account Manager within the RU, who is responsible for coordinating and administering the action plan and should serve as the primary customer contact after the account is downgraded to substandard or worse. Account manager should review all documents, meet the customer and prepare a Classified Loan Review Report (CLR). The head of credit should approve the CLR for NPLs up to 15% of the bank's capital, and excess of 15% be approved by MD/CEO according to CRM guideline. As per CRM guideline, the CLR's for NPLs above 25% of capital should be approved by the MD/CEO, with a copy received by the Board. Bank may wish to introduce incentive program to encourage RU to bring down the NPLs. RU should take legal action against the defaulted borrower as a last resort to recovery the credit.

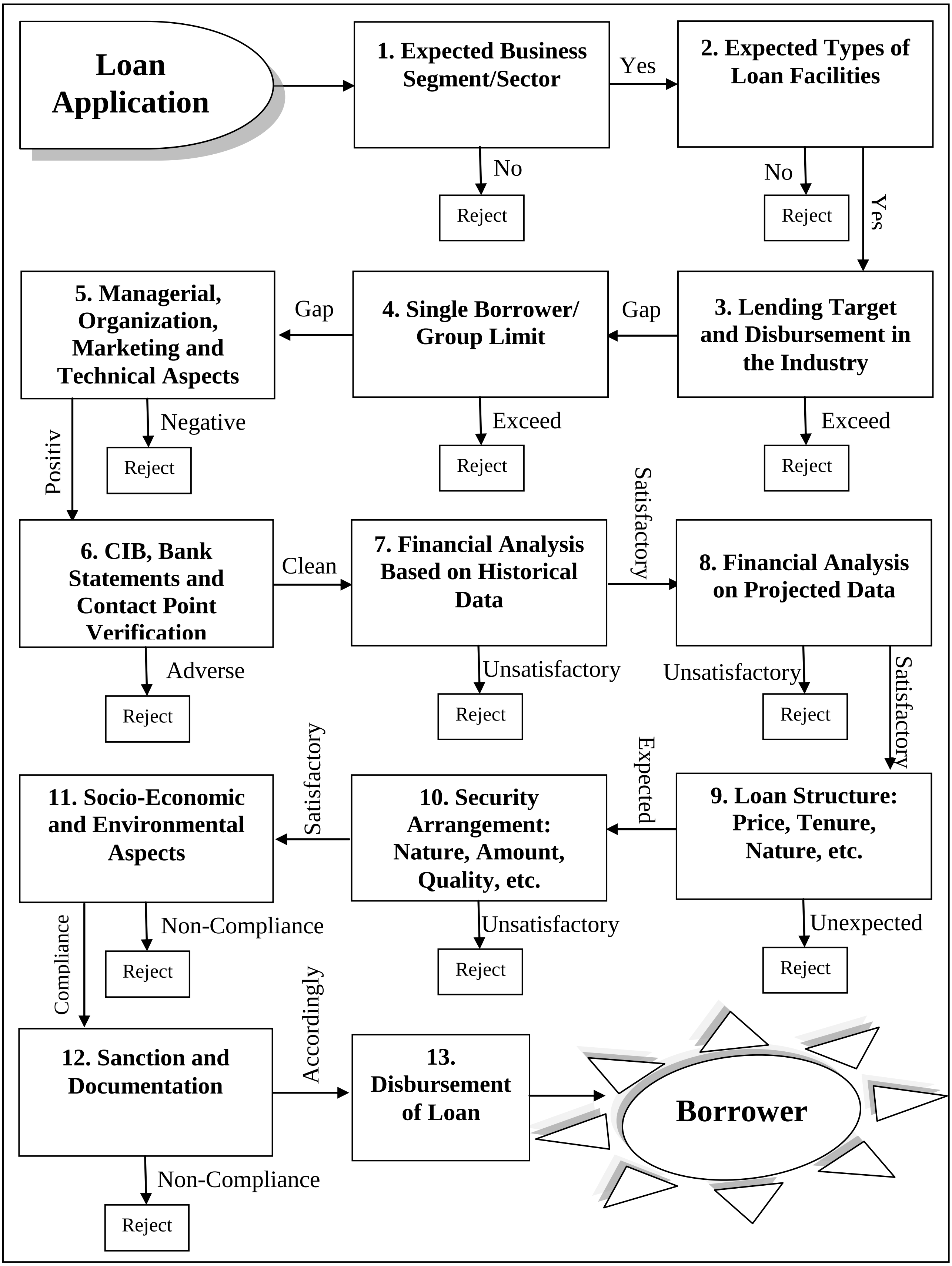
**FlowChart-2.1: Credit Flow-Chart of Bank**

| By Whom to be Done | What to be Done |
|---|---|
| **Origination of Credit** | |
| Relationship Manager (RM) | 1. Discussion with Client about Credit Facilities |
| | 2. Ensuring Expected Business Segment/Sector and Expected Types of Loan Facilities |
| | 3. Reviewing Lending Target-Disbursement in the Industry and Single Borrower/ Group Limit |
| | 4. Receiving Request for Credit from the Client along with Related Papers, Documents, etc. |
| | 5. Scrutinizing/Verification of Submitted Documents and Information |
| | 6. Collection of all Other Required Information |
| | 7. Appraisal of Managerial, Organizational, Marketing, Technical, Socio-Economic &Environmental Aspects |
| Relationship Manager (RM) through Credit Administration (CAD) | 8. Collection of Client's CIB |
| Relationship Manager/Marketing (RM) | 9. Analysis of Loan Structure, Purpose of Loans, etc. |
| | 10. Financial Analysis (Historical &Projected Data) |
| | 11. Analyzing Security Offered by Client |
| | 12. Completing ICRRS Score Sheet |
| | 13. Collection of Credit Rating Done by ECAI of Client, if Possible |
| | 14. Finalization of Loan Structure and Security Arrangement |
| | 15. Recommendation of the Credit Proposal and Placing for Approval to HOCB or Head of CRM |
| **Approval of Loan Proposal** | |
| The Head of Credit Risk Management (CRM) | 16. Forward to Risk Management Unit (RMU) for their Observation |
| Risk Management Unit (RMU) | 17. Send back to CRM after Putting Observations |

| | |
|---|---|
| The Head of CRM | 18. Forward to Processing Unit (PU) under CRM |
| Processing Unit (PU) under CRM | 19. Forward to Approval Unit (AU) under CRM |
| The Head of CRM (if beyond his power) | 20. Forward to Managing Director (MD)/CEO for Approval |
| Managing Director (MD)/CEO (if beyond his power) | 21. Forward to Executive Committee (EC)/Board for Approval |
| Executive Committee (EC)/Board | 22. Returned Proposal on Approval/Rejection to CRM |
| The Head of CRM | 23. Forward Approved/ Rejected Proposal to RM |
| **Documentation and Disbursement** | |
| Relationship Manager/Marketing (RM) | 24. Making 2 Copies of Approved Proposal and Send one to RMU and the other to CAD |
| Credit Administration (CAD) | 25. Issue Sanction /Offer Letter along with Loan Documentation Check List (LDCL) to RM |
| Relationship Manager/Marketing (RM) | 26. Advise Sanction/Offer Letter to Client |
| | 27. Collection of Client's Acceptance with all Documents |
| | 28. Completing LDCL and Forward to CAD |
| Credit Administration (CAD) | 29. Documentation and Stepping towards Disbursement |
| | 30. Disbursement of Credit ensuring Compliance with all Terms and Conditions of Sanction Letter |
| **Monitoring and Follow-up** | |
| Relationship Manager (RM) | 31. After Disbursement, Regular Follow-up of the Credit |
| CAD/Zone | 32. Monitoring Credit based on Due-Date-Diary |
| Relationship Manager (RM) | 33. Identification of Early Alert Account & Reporting to CRM |
| The Head of CRM (for positive change) | 34. Conversion of Early Alert Account to Regular A/c Status |
| Relationship Manager (RM) | 35. Classification and Making Provision as per Policy |
| **Recovery of Credit** | |
| Relationship Manager/Marketing (RM) | 36. Transfer of all accounts of Sub Standard (SS) or Worse to A/c Manager within RU |
| Account Manager within RU | 37. Determination of Recovery Strategy |
| | 38. Pursue All Options of Non-Legal Measures to Maximize Recovery |
| | 39. Making Loan Loss Provisioning based on Actual and Expected Losses |
| | 40. Regular Review of Grade 6 (SS) or Worse A/c |
| | 41. Preparation of Classified Loan Review (CLR) on a Quarterly Bases |
| | 42. Recovery of Credit Through Legal Action against Defaulted Clients |

**Source:** Banerjee et al (2014)

**FlowChart-2.2: Decision Flow Chart of Borrower Selection**




**Source:** Siddique et al (2014)

## 2.3 Credit Investigation

Credit is defined as the confidence of the lender on the ability and willingness of the borrower to repay the debt as per the schedule of payment. As per this definition, we must build confidence on the borrower's ability and willingness. An in-depth analysis and investigation is a pre-condition for building confidence on the borrower's ability and willingness.Investigation refers to the careful and official examination of facts about something. It is also defined as a process of collecting information and evidences about something that helps to form an opinion about the subject under investigation.Credit investigation refers to a process of carefully examining and assessing credit proposal and other information from different dimensions for the purpose of collecting information and evidences that will help forming an opinion regarding the credit. Credit investigation helps greatly in the process of selecting quality borrower.Before allowing credit facility a banker should be satisfied that the applicant qualifies the following five essentials which may be termed as 6 Cs namely-

- ***Character:***Lenders want to put their money with companies that have impeccable credentials. Credit officer should look at borrower's integrity, honesty, intention to repay the loan money, commitment, credit record, dependability etc.
- ***Capacity:***Capacity to repay a loan is the most important criterion used to assess a borrower's creditworthiness. To assess borrower's capacity, the lender will consider various factors such as identity of customer and guarantor, legal structure, owners, nature of operations, products and principal customers and suppliers for a business borrower, borrower's business ability, business experience, technical knowledge, age
- ***Capital:*** Financial strength to cover a business risk, stake in business, solvency, retention of earning, ability to infuse more money, take home pay for an individual (for retail loan), turnover of payables receivables, and inventory etc.
- ***Condition:***Condition refers to the overall economic climate, both within the borrower's industry and in the economy generally, that could affect the borrower's ability to repay the loan. It indicates customer's performance vis-à-vis comparable firms in the same industry, competitive climate, economic trends, industry growth, competitive & regulatory environments, working conditions etc.
- ***Collateral***: Borrower's ability to produce additional securities i.e., ownership of assets, asset quality, type, location, title, liens encumbrances and restrictions, insurance coverage, guarantees,forced sales value etc.

- ***Cash Flow:*** The loan given will ultimately be repaid from the cash flow of the business. Cash generating ability is an important determinant for assessing the borrower's repayment ability. So, appraising the future cash flow of the borrower is crucial.

**Stages of Credit Investigation**

Credit investigation of a borrower may be completed in the following stages:

- Collecting information;
- Assessing collected information;

**Collecting Information**

A lot of sources are there to collect information about a borrower. The list includes the following but not limited to:

- Personal Interview
- Loan application
- Published Financial Statements, if any
- Site visit and observation
- CIB report
- Confidential report from other banks
- Registration records
- Information from credit rating agency
- Press reports regarding purchase, sale, pending cases or verdict of cases.
- Utility services bill payment
- Tax Authority
- Competitors, supplier, customer etc.

**Assessing Collected Information**

Credit assessment helps the banker to ensure selection of right type of loan proposals/projects/ventures/enterprise and right type of borrower. Once the information is collected, it must be assessed from different dimensions. Whenever a customer approaches with request for a credit facility, the branch Relationship Management will go through the loan application submitted by the client and collect the required information, papers and documents, review the merit and prepare a fully documented credit proposal for approval of the same from appropriate authority. S/he must apply maximum prudence to assess the collected information, which will eventually help the management to take the right decision regarding the selection of the borrower.

**Step -1 Preliminary Screening**

- Applicantsage, experience, business, year of existence, key persons of operation, position in industry, ownership of the business, Existing customers, any reference, applicant's other business / sister concerns etc.
- Purpose&type of request, relevance of the facility, facility amount, justification of the specific amount, tenor, whether logical in terms of nature of the facility and asset conversion cycle of client's business, source & modes of repayment.
- Reason to borrow, startup capital or working capital or short-term sales growth or long-term sales growth or increase in working capital or import from abroad or execution of a job, fixed asset replacement, expansion of fixed asset or BMRE of existing project or unprofitable or marginally profitable operations
- The request is within bank's credit policy

**Step-2 Business Prospect of the Borrower**

- Customer's past performance with existing facilities (if any).
- Customer's business growth & future prospect
- Customer's capability and presence of 2nd line (successor).
- Opportunity of new business through sister concern.
- Other business support (e.g. deposit mobilization)
- Scope of non-funded business / other services.
- Customer's equity contribution
- Total group exposure within regulatory ceiling.

**Step-3 Industry and Business Risk analysis**

- Study**Industry Risks** issues: Cost Structure, Tied up period, Cyclic aspect, stock turnover, receivable turnover etc., Concentration on some specific customer / supplier, Dependence, Vulnerability to substitutes, Competitors' entry / exit barrier, Regulatory issues (Govt. Policies like child labor, health hazard, Taxes, Duties, Environment, Judiciary, Bangladesh Bank regulations)
- Analyze**Business Risks** issues: Business size, cycle, maturity, diversification, market spread, Product specialty, bargaining power, availability, consistency, vulnerability to technology, presence of alternatives, Position of competitors in the same business / industry, Labor relations, experience, successor, Ownership

structure, Members of board, track record of meeting goals, integrity, market reputation etc.

**Step-4 Financial Statement Analysis**

- Operating efficiency through various Ratio analysis
- Marketability of the customer's products or services through Ratio Analysis
- Measuring the adequacy of the Earnings through Ratio Analysis
- Liquidity indicators through Ratio Analysis
- Profitability indicators through Ratio Analysis
- Financial Leverage through Ratio Analysis

**Step-5 Cash Flow Analysis**

Study the cash flow statement of the customer's business:

- To analyze-Operating, investing and financing activities of the client's business
- Trend of increase or decrease in sales compared to previous years.
- Changes in debtors and cause thereof.
- Trend of increase or decrease in sales, COGS compared to previous years.
- Changes in Stock volume and cause thereof.
- Changes in creditors and cause thereof.
- Trend of increase or decrease in operating costs.
- Whether the company paid all operating costs from internally generated cash.
- Whether the company paid the costs of its external financing without additional borrowing.
- Whether the company paid principal debts from internally generated fund.

**Step -6 Projections**

- Projected Profit and Loss Account
- Projected Balance Sheet,
- Sensitivity Analysis: Best Case/worst Case scenario
- Common size Analysis
- Analysis with the peers in the same industry

**Step -7 Identification of Risk and Mitigation thereof**

- At the time of screening of customer's application, the analyst will definitely identify some risks/weakness associated with the requested credit. It is the responsibility of the analyst to find out probable mitigation factors for the risks or to suggest corrective measures of the weaknesses. Credit analyst among others must focus on Management risk, Industry / Market risk, Business risk, Financial risk, Facility risk and collateral risk.

**Step-8 Summary and Recommendation**

- Summarize the Major Risks identified, Magnitude of the Risks and the Risk Mitigation options.
- Whether the level of identified risks is acceptable to the bank management.
- Whether there is available strategy for dealing with such risks in the future.
- To make specific recommendation in favor of (or other) the requested credit.

**Step-9 Loan Structuring**

- **Type of credit facility** (short term or long term / continuous or deal basis) as will be appropriate for the customer.
- **Mode of disbursement** of the Loan should be in terms of customer's drawing requirement for proper utilization.
- **Loan pricing** to be considered with the associated Risks/ risk Mitigants, competition in the industry, Regulators guide line etc.
- **Mode of repayment** of the loan shall be in terms of asset conversion cycle (may be continuous basis or in lump sum or in equal installments.)
- **Loan support security** Primary, Collateral, Guarantee, Undertaking Supplementary Agreement must be adequate (with some exception) to cover the proposed credit exposure.
- **Loan documentation and compliance of** covenants must be duly executed (with stamping, registration as applicable) and retained at Bank's custody.

If all the steps are followed properly with due diligence, the analyst will be able to prepare a standard credit memorandum at the branch level which will facilitate head office analysts and approving authority to sanction the appropriate credit to the customers avoiding unnecessary queries and correspondences. It will help to deliver credit in time and effective manner which will ultimately be helpful to the bank to manage credit risk successfully, maintain a sound portfolio and to ensure a sustainable growth of the bank.

## 2.4 Preparation of Credit Proposal

Credit proposal is a summary of the information collected or obtained from observation and investigation. Generally, a credit proposal should include all relevant information needed to take credit decision. A contemporary credit proposal may include, but not limited to, the following:

| **Sl. No.** | **Items to be Included in the Credit Proposal** | **Description** |
|---|---|---|
| 1. | Purpose of Request | • State the purpose of request, nature of facility, proposed limit, expiry and pricing |
| 2. | Applicant's Existing and Proposed Exposure | • State the existing limit, outstanding, proposed limit, expiries |
| 3. | Break Up of Outstanding Liabilities (if any) | • State the amount, disbursement date, expiry etc. |
| 4. | Total Group Exposure (Inclusive of Related Parties) | • State the existing limit, outstanding, proposed limit, expiries of sister concerns |
| 5. | Security Summary | • Consider Landed Property, Cash Collateral, Margin etc. |
| 6. | Relationship/Account Turnover/ Account Profitability | • When account relationship and credit relationship started<br>• State if repayments/adjustment has been regular etc.<br>• Account Turnover Status.<br>• State Account Profitability<br>• Reason for overdue / past-due, if applicable |
| 7. | Company/Management/Group Affiliation/Corporate Structure | • Shareholdings/Management structure of Obligor |
| 8. | Brief on The Company/ Management | • Year of Establishment<br>• Legal Status of Obligor<br>• Experience, Education of key persons<br>• Date of starting trial production. Date of starting commercial production for manufacturing concern<br>• Number of years of business in present address<br>• Ownership of Business Premises/Factory/ Showroom<br>• Description of Machineries<br>• Number of Shops/Sales Center, show room, Go-down, Address of each, Space/Size of each<br>• Maximum/Average Storage Capacity of each<br>• Experience of the Key Management |
| 9. | Business / Industry Analysis | • Provide brief description on company's lines of business/product/ market position<br>• How others in the same business/industry are doing<br>• Pricing / Marketing / Special advantage etc. |

| Sl. No. | Items to be Included in the Credit Proposal | Description |
|---|---|---|
| | | • Source of Raw Material/Trading Items<br>• Major Customers and Areas<br>• Major Competitors<br>• Receivables ageing<br>• Tied up Period of Stock; Accounts Receivables; Accounts Payable<br>• Average Sales Per day |
| 10. | Financial Performance | • Attach financial spread sheet of Obligor for the last three years duly signed<br>• State whether audited/management certified and the name of the Audit firm as applicable<br>• Sales & Profitability<br>• Inventory, Book Debts<br>• Asset Conversion Cycle/Cash flow position/Working Capital Assessment<br>• Equity/Investment, Liquidity, Leverage<br>• Briefly comment on sales & profit projections as appropriate; any significant changes / trends |
| 11. | Bank Report/ CIB Report/ Call Report | • Collect and attach CIB report from Bangladesh Bank |
| 12. | Status of the Accounts/Limits with Other Banks | • State name of the bank & branch, name of the account, limit, outstanding, status of a/c |
| 13. | Other Business Interest of the Obligor | • State name of the company, nature of business, equity interest, sales, net profit, net worth, banker |
| 14. | Justification of Limits | • Reason of New facility/enhancement<br>• Calculation of required facility in light of the following<br>• Capacity Utilization (Maximum, Average & Present)<br>• Changes in Scope of business<br>• Changes in Market demand<br>• Capacity Enhancement (Production/Storage)<br>• Storage Facility (Existing & Future)<br>• Change in Price of ingredients<br>• Supported by govt. policy<br>• Business relationship<br>• Person behind the business<br>• Security Coverage |
| 15. | Critical Risks and Mitigating Factors | • State the critical risks of this business and give mitigating factors |
| 16. | Regulatory Compliance | • Does the client have clean CIB report? |

| Sl. No. | Items to be Included in the Credit Proposal | Description |
|---|---|---|
| | | • Does the application fall within single obligor limit?<br>• Does the application fall within large loan limit?<br>• Does the application comply with DOE/Import-Export Policy etc.?<br>• Does the client have NOC (where applicable) from relevant regulatory body e.g. DOE? |
| 17. | Detail of Credit Facilities Proposed for Approval | • Give detail of credit facilities proposed with purpose, security, collateral, support and repayment sources and conditions/covenants |
| 18. | Security/Collateral Analysis | • State the security, collateral and support obtained for the credit proposal<br>• Mention the value of the security as per latest financial statement or as per inspection report with date.<br>• For 3rd Party collateral, mention relationship of the owner with the borrower. |
| 19. | Security/Collateral Summary | • Description of the Security and Collateral |
| 20. | Branch Comments/ Recommendations | • Indicate key conclusions reached by the Branch from the perspective of the transaction/facilities, credit quality, and the business attractiveness:<br>✓ Financial Strength<br>✓ Earnings (Actual and projected earnings, Account turnover and volume)<br>✓ Satisfactory track record<br>✓ Security/Collateral perspectives<br>✓ Business Strategy (Reduce, Hold or Grow – as applicable) |
| 21. | Final Recommendation | • State type of facility, limit, purpose, pricing, expiry etc. |
| 22. | Issues/Exceptions and Its Rectification/Completion of Loan Documentation | • If any legal/Charge document is yet to execute by the Borrower<br>• Any required Papers/Clearance Certificate/ NOC/License/Rajuk approved plan<br>• Compliance of the last Audit Report, if applicable<br>• Bangladesh Bank Auditors comments (mention if any)<br>• Projected time to regularize the document Deficiency |

If all the steps are followed properly with due diligence, the analyst will be able to prepare a standard credit memorandum at the branch level which will facilitate head office analysts and approving authority to sanction the appropriate credit to the customers avoiding unnecessary queries and correspondences. It will help to deliver credit in time and effective manner which will ultimately be helpful to the bank to manage credit risk successfully, maintain a sound portfolio and to ensure a sustainable growth of the bank.

## 2.5 Analysis of Financial Statements and Financial Ratios

### 2.5.1 General View about Financial Statements (F/S)

From the viewpoint of the reporting entity, financial statements are the means of reporting economic activities of an enterprise to the stakeholders. On the other hand, from the stockholder's point of view, it is a source of reliable financial information needed for taking economic decisions. Since financial statements are the means of reporting economic activities, the reporter must understand the economic activities of the enterprise. But only understanding of the economic activities is not sufficient for preparing financial statements. The reporter must also comply with the local regulatory requirements, accounting standards and international accounting standards in the process of preparing the financial statements in so far it is concerned with reporting the external users. These regulations and standards decide the formats of the financial statements. This sort of standardization of the formats of financial statements is required to facilitate comparison of financial statements of different entities. Comparability is a great quality of accounting information as economic decisions are taken based on comparison.

### 2.5.2 Financial Statements as per International Accounting Standards (IAS)

As per International Accounting Standard-1 (revised 1997), a complete set of financial statements includes the following five components:

- Balance Sheet
- Income Statements
- Statement of Changes in Equity
- Cash Flow Statement
- Accounting Policies and Explanatory Notes.

**Balance Sheet (B/S):** B/S is a statement of assets, liabilities, and owners' equity. This is prepared to know the financial position (financial health) of a business entity at a particular point of time.

**Income Statement (I/S):** I/S is a statement of revenues and expenses in which periodic expenses are deducted from the periodic revenues. This statement is prepared to know the operating result (income or loss) of a business entity during a period of time.

**Statement of Changes in Equity:** This statement is prepared for a period of time to determine the owner's claim on the resources of a business entity. It also reports how owner's claim changes over a period of time.

**Cash Flow Statement:** It shows the inflows and outflows of cash of a business entity during a particular period of time and finally the balance of cash at the end of a period. This is a vital statement to a banker.

**Accounting Policies and Explanatory Notes:** This part includes supporting calculations, schedules, and disclosures regarding the accounting principles, policies, post balance sheet events etc.

### 2.5.3 Financial Statements Analysis

Financial statement analysis consists of applying analytical tools and techniques to financial statements and other relevant data to obtain useful information. This information reveals significant relationships between data and trends in those data that assess the company's past performance and current financial position. The information shows the results or consequences of prior management decisions. In addition, analysts use the information to make predictions that may have a direct effect on decisions made by users of financial statements.

### 2.5.4 Tools of Financial Statement Analysis

Various tools are used to analyze income statement and balance sheet. Three commonly used tools are:

**Horizontal Analysis:** Horizontal analysis is called trend analysis. It is a technique for evaluating a series of financial statement data over a period of time. It is used primarily in intra-company comparisons. Its purpose is to determine the increase or decrease that has taken place, expressed as either an amount or a percentage.

$$\textbf{Formula to calculate change} = \frac{\textbf{Current Year Amount} - \textbf{Base Year Amount}}{\textbf{Base Year Amount}}$$

Two features in published financial statements facilitate this type of comparison: **First**, each of the basic financial statements is presented on a comparative basis for a minimum of two years. **Second,** a summary of selected financial data is presented for a series of 5 to 10 years or more.

**Vertical Analysis:** Vertical analysis is a technique for evaluating financial statement data that expresses each item in a financial statement in terms of a percent of a base amount.

Sometimes it is referred to as **common size analysis**. The value of total assets is used as the base amount for balance sheet items and the value of sales for income statement items. Vertical analysis is used in both intra-company and inter-company comparison.

**Ratio Analysis:** Ratio Analysis is the most widely used tool of financial analysis. Ratio analysis expresses the relationship among selected items of financial statement data. A ratio expresses the mathematical relationship between two figures. Ratios are used to evaluate operating and financial performance of a firm. Financial ratios are designed to help one to evaluate financial performance of a firm i.e. through ratio analysis we can identify financial strength and weakness of a firm. By observing financials at a glance, one cannot immediately understand the actual financial condition of a firm i.e. whether the financial condition of the firm is improving or not. Through ratio analysis we can easily understand the actual financial condition of the firm, comparing various ratios.

For example: Is earnings of Tk.5,00,000 actually good? If we earn Tk.5,00,000 on Tk.50,00,000 of sales (10% profit margin ratio) that might be quite satisfactory, whereas earnings Tk.5,00,000 on Tk.5,00,00,000 could be disappointing (i.e. 1% return)

***Mode of Expression***

1. **Times:**which is the ratio between the two numerical facts over a period of time, for example, stock turnover is three times a year.
2. **Proportion:**which is arrived at by the simple division of one number by another, for example, Current ratio is 2:1.
3. **Percentage:**which is a special type of rate expressing the relationship in hundred, for example, gross profit ratio 30%.

***Importance of Ratio Analysis:***

1. To measure general efficiency
2. To measure financial solvency
3. Forecasting and planning
4. To facilitate decision making
5. Aid in corrective action
6. Aid in intra-firm comparison

***Standard of Comparison:***

- **Intra-company comparison**: Compare the calculated ratios of the company over the period of time.
- **Inter-company comparison:** Another way of comparison is to compare the ratios of one firm with some selected firms in the same industry at the same point of time.
- **Industry average:** Calculated ratios may be compared with average ratios of the industry of which the firm is a member.
- **Ideal Ratio:** Experts have laid down some standard after making numerous experiments in various companies and at various places. The calculated ratios are compared with those ideal ratios.

***Fundamental Classification of Ratio:***

According to Financial Spread Sheet (FSS) there are six types of ratios, which are as follows:

**Growth Ratio:**Growth ratios measure the company's potentiality, performance. It also measures whether the company will survive. Example of growth ratios are sales growth, assets growth etc.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Sales Growth, Sales % | [(CY.S - PY.S) / PY.S] × 100 | Rule of Thumb= Higher is better, comparing with previous years or industry average |
| 2. Net Sales Growth, Composite % | [(CY.NS - PY.NS) / PY.NS] × 100 | Rule of Thumb= Higher is better, comparing with previous years or industry average |
| 3. Net Income Growth, % | [(CY.NI - PY.NI) / PY.NI] × 100 | Rule of Thumb= Higher is better, comparing with previous years or industry average |
| 4. Total Assets Growth, % | [(CY.A - PY.A) / PY.A] × 100 | Rule of Thumb= Higher is better, comparing with previous years or industry average |
| 5. Total Liabilities Growth, % | [(CY.L - PY.L) / PY.L] × 100 | Rule of Thumb= Lower is better, comparing with previous years or industry average |
| 6. Net Worth Growth, % | [(CY.W - PY.W) / PY.W] × 100 | Rule of Thumb= Higher is better, comparing with previous years or industry average |

Note: CY= Current Year, PY= Previous Year, NS= Net Sales, A= Total Assets, L= Total Liabilities, W= Net Worth

**Profitability Ratio:** Profitability indicates the efficiency of the unit in generating surplus. In order to have a ratio, we can compare profit to the factors, which regulate the quantum of profit directly, like sales and the total assets or equity. Profitability ratios measure the income or operating success of an enterprise for a given period of time e.g., gross profit margin, operating profit margin etc.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Gross Margin, Composite % | (GP / Sales) × 100 | Rule of Thumb= 25% to 30%, higher is better |
| 2. SG & A, % | (SG & A / Sales) × 100 | Rule of Thumb= Lower is better. |
| 3. Cushion (GP-SG&A), % | {(GP-SG&A) / Sales} × 100 | Rule of Thumb= Higher is better |
| 4. Depreciation. Amortization,% | (Depreciation / Sales) × 100 | Rule of Thumb= Lower is better |
| 5. Operating Profit Margin, % | (EBITDA / Sales) × 100 | Rule of Thumb= 20% to 25%, higher is better |
| 6. Interest Expense, % | (Interest / Sales) × 100 | Rule of Thumb= Lower is better |
| 7. Operating Margin, % | (Profit before tax & Extra Income / Sales) × 100 | Rule of Thumb= Higher is better |
| 8. Net Margin, % | (NP / Sales) × 100 | Rule of Thumb= Higher is better |
| 9. Return on Assets, % | (NP / Assets) × 100 | It measures the profitability of investments.<br>Rule of Thumb= Higher is better |
| 10. Return on Equity, % | (NP / Net Worth) × 100 | Measures earning power on shareholders' equity<br>Rule of Thumb= Higher is better |
| 11. Dividend Payout Rate, % | (Dividend / NP) × 100 | Rule of Thumb= Lower is better to long term creditors. |

Note: EBITDA= Earnings Before Interest, Tax, Depreciation & Amortization, SG & A= Selling, General & Administrative Expense

**Coverage Ratio:**These ratios measure the ability of a company to generate cash to pay interest and principal repayments e.g., interest coverage ratio.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Interest Coverage (×) | (EBIT / Total Interest) | How many times the income is sufficient to cover the interest expense. Rule of Thumb = higher is better |
| 2. Debt Service Coverage (×) | [EBITDA / (Total Interest + CMLTD)] | It reflects the company's ability to serve long-term debt. Rule of Thumb = Must be Greater than one. |

Note: EBIT= = Earnings Before Interest & Tax, CMLTD= Current Maturity of Long Term Debts.

**Activity Ratio:**It has been widely accepted that the profitability of an enterprise to a large extent depends on its efficient asset utilization or activity performed. Activity ratios measure how efficiently the firm employs the assets. These ratios are also called efficiency ratios or asset management ratios.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Receivable in Days | (AR / Sales) × 365 | Shows average number of days receivables are outstanding before being collected.<br>Rule of Thumb= Lower is better. |
| 2. Payable in Days | (AP / COGS) × 365 | Indicates the average length of time trade debt is outstanding. Rule of Thumb = Higher indicates the creditors are not paid in time and lower shows that the business is not taking the full advantage of credit period allowed by the creditors. |
| 3. Inventory in Days | (Inventory / COGS) × 365 | Shows the average no. of days the inventory is held before it is turned into accounts receivable through sales. Rule of Thumb= Lower is better, compare with previous years. |
| 4. Sales to Total Assets, (×) | (Sales / Total Assets) | Shows how efficiently assets are used to generate sales. Rule of Thumb= Higher is better. |

Note: Sales= Total Sales Revenue, AR= Account Receivable, AP= Account Payable, COGS= Cost of Goods Sold

**Liquidity Ratio:**The liquidity or short-term solvency of an organization can be measured with the help of current ratio and quick ratio. Liquidity implies to the ability of an organization to pay off its short-term obligations with the current assets.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Working Capital | CA – CL | It is a measure of company's liquidity position.<br>Rule of Thumb= Larger is better |
| 2. Quick Ratio | Cash & Cash Equivalent + Receivables / CL | Measures ability to meet current debts with most liquid (quick) assets.<br>Rule of Thumb= 1:1, higher is better |
| 3. Current Ratio | CA / CL | Measures ability to meet current obligations with current assets.<br>Rule of Thumb= 2:1, higher is better |
| 4. Sales to Net Working Capital | Sales / Net Working Capital | Rule of Thumb= Higher is better |

Note: CA= Current Assets, CL= Current Liabilities

**Leverage Ratio:**Ratios, which measures the extent to which a firm has been financed by debt. It is also known as debt management ratios. Examples of leverage ratios are debt ratio, etc.

| Name of Ratio | Components or Formula | Implications |
|---|---|---|
| 1. Total Liability to Net Worth (×) | TL / NW | Indicates the extent to which debt financing is used relative to equity financing. Rule of Thumb= 1:1, Higher indicates less protection for lender |
| 2. Affiliate Exposure to Net Wirth(%) | (AE / NW) × 100 | |
| 3. Total Liability to (Net worth–Affiliate Exposure) (×) | TL / (NW – AE) | |

Note: TL= Total Liabilities, NW= Net Worth, AE = Affiliate Exposure

As per ICRR score sheet (as prescribed by Bangladesh Bank), a bank officer must calculate the following ratios for understanding the financial risk of a business.

| Quantitative Indicators | | Weight | Definition |
|---|---|---|---|
| 1. Leverage (10%) | a) Debt to Tangible Net Worth (DTN) | 7 | Total Interest-Bearing Liabilities or Financial Debt/Total Tangible Net Worth |
| | b) Debt to Total Assets (DTA) | 3 | Total Interest-Bearing Liabilities or Financial Debt/Total Assets |
| 2. Liquidity (10%) | a) Current Ratio (CR) | 7 | Current Assets/Current Liabilities |
| | b) Cash Ratio (Cash) | 3 | Cash and Easily Marketable Securities/Current Liabilities |
| 3. Profitability (10%) | a) Net Profit Margin (NPM) | 5 | Net Profit after Tax/Net Sales |
| | b) Return on Assets (ROA) | 3 | Net Profit after Tax/Total Assets |
| | c) Operating Profit to Operating Assets (OPOA) | 2 | Operating Profit/Average Operating Assets |
| 4. Coverage (15%) | a) Interest Coverage (IC) | 3 | Earnings Before Interest and Tax/Interest Expense |
| | b) Debt Service Coverage Ratio (DSCR) | 5 | Earnings Before Interest Tax Depreciation Amortization/Debts to be Serviced |
| | c) Operating Cash Flow to Financial Debt Ratio (OCDR) | 4 | Operating Cash Flow/Financial Debt |
| | d) Cash Flow Coverage Ratio (CCR) | 3 | Cash Flow from Operation/Debts to be Serviced |
| 5. Operational Efficiency (10%) | a) Stock Turnover Days (STD) | 4 | (Total Inventory/Cost of Goods Sold)*360 |
| | b) Trade Debtor Collection Days (TDCD) | 3 | (Total Accounts Receivable/Sales)*360 |
| | c) Asset Turnover (AT) | 3 | Sales/Total Assets |
| 6. Earning Quality (5%) | a) Operating Cash Flow to Sales (OCFS) | 3 | Operating Cash Flow/Sales |
| | b) Cash Flow based Accrual | 2 | NI-(CFO+CFI)/Average Net |

| Quantitative Indicators | | Weight | Definition |
|---|---|---|---|
| | Ratio (CFAR) | | Operating Assets |

## 2.6 Internal Credit Risk Rating Systems (ICRRS)

The aim of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable levels. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual borrower transaction. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization. Since exposure to credit risk continues to be the leading source of problems in banks, banks should have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and they are adequately compensated for risks incurred. The Internal Credit Risk Rating System describes the creditworthiness of the borrower of a particular sector based on the assessment criteria set for that sector. Since the leverage, liquidity, profitability, as well as other quantitative and qualitative indicators vary significantly from sector to sector, the ICRRS is developed to calibrate such diversities into the rating system. Moreover, the relevant and appropriate numbers of financial ratios are used in Internal Credit Risk Rating System for assessing the financial and credit strength of the borrowers. The set of the qualitative questionnaires used in the process is also more robust. This will effectively ensure that the borrowers from different sectors and industries are assessed based on the unique characteristics of those sectors.

### 2.6.1 Definition and Use of Internal Credit Risk Rating System

- Internal Credit Risk Rating System refers to the system to analyze a borrower's repayment ability based on information about a customer's financial condition including its liquidity, cash flow, profitability, debt profile, market indicators, industry and operational background, management capabilities, and other indicators. The summary indicator derived from the system will be called Internal Credit Risk Rating (ICRR).
- Internal Credit Risk Rating System will be an integral part of credit risk management for the banks. The key uses of this guideline are as follows:
  a) To provide a granular, objective, transparent, consistent framework for the measurement and assessment of borrowers' credit risk.
  b) To facilitate the portfolio management activities.

c) To assess the quality of individual borrower to help the banks to determine the quality of the credit portfolio, line of business of the branch or the Bank as a whole.
d) To be used for individual credit selection, credit pricing, and setting credit limit and terms & conditions.

### 2.6.2 Functions of Internal Credit Risk Rating System

- Internal Credit Risk Rating System is a fully automated credit risk scoring system that calibrates the characteristics of different sectors and industries in one single model;
- To get the appropriate rating and score, the analyst shall select the appropriate sector or industry from the drop-down list given in the top page of the template. If the right sector or industry is not selected, the rating will not reflect the unique characteristics of the particular sector or industry.
- If the borrower is in multiple lines of business, the sector should be used assessing the lines of business generating the highest portion of the revenue &/or profit. If no particular line of business can be singled out, the ICRRS should be conducted using "other industry" - if manufacturing, or "other service" - if service.

### 2.6.3 General Instructions Related to ICRRS

a) Banks shall strictly follow this guidelines and rating system issued by Bangladesh Bank without making any change, extension, modification or deletion.
b) The ICRRS shall be applicable for all exposures (irrespective of amount) except consumer loans, small enterprises having total loans exposures less than BDT 50 (fifty) lac and small enterprises in manufacturing having total loans exposures less than BDT 1 (one) crore, short-term Agri loans, micro-credit and lending to bank, NBFI and Insurance.
c) The quantitative part of the ICRRS exercise shall be conducted by a credit officer/an analyst. The Relationship Manager/Branch Manager shall complete the qualitative assessment part to generate the total scores.
d) ICRRS shall be an integral part of the credit approval process.
e) The credit risk function of the bank is responsible for the accuracy and integrity of the rating as the second line of defense.
f) The executive summary report of the ICRR score of the borrower shall be approved and signed by the Chief Risk Officer (CRO) and for those loans that are approved below the CRO level e.g. zonal office or branch office, the executive summary report of the ICRR score shall be approved and signed by the final approval authority at that level.

g) Banks shall use the latest audited financial statements of the borrower for generating the quantitative rating under ICRRS.

h) All credit proposals whether new, renewal or enhancement shall be gone through the ICRR process and the ICRRS report shall be retained in the loan file.

i) The Relationship Manager shall pass the approved ICRRS report to the related department for updating its MIS/record.

j) Banks shall conduct the routine internal audit to check whether the Internal Credit Risk Rating System is functioning as per the instructions laid down in the guidelines.

### 2.6.4 Frequency of Credit Risk Scoring

ICRRS shall be conducted for all credit proposals including new, renewal and enhancement of the existing proposal. For existing credit relationship, the ICRRS shall be reviewed at least annually at the time of annual/regular credit review.

### Selected Sectors

To ensure the current system useful, the following sectors are selected considering the size of exposures of banks in these industries:

- **Industry:** Ready Made Garments (RMG), Textile (including spinning, knitting, weaving), Food and Allied Industries, Pharmaceutical, Chemical, Fertilizer, Cement, Ceramic, Ship Building, Ship Breaking, Jute Mills, Steel Engineering, Power and Gas, Other Industry
- **Trade and Commerce**
- **Agro Base and Agro Processing**
- **Service:** Housing and Construction, Hospitals and Clinics, Telecommunication, Other Service

### 2.6.5 Internal Credit Risk Rating Scores

The ICRR consists of 4-notched rating system covering the Quantitative and Qualitative parameters. The ratings and scores are mentioned below which may change from time to time.

| Rating | Original Score | Revised Score |
|---|---|---|
| Excellent | >= 80% | >= 75% |
| Good | >= 70% to < 80% | >= 65% to <75% |
| Marginal | >= 60% to < 70% | >= 50% to <65% |
| Unacceptable | <60% | <50% |

### 2.6.6 Management Action Triggers

a) Banks are allowed lending to a borrower if the borrower's ICRR is "Excellent" or "Good". However, for the "Marginal" cases, the bank shall take cautionary measures in renewing the facilities or lending new money to the customers. While assessing credit proposals, banks must satisfy themselves on the future prospect of the business, additional collateral coverage, etc. Banks shall take heightened measures for monitoring these accounts including but not limited to regular client visits, monitoring of the improvement plans, close monitoring of the repayment performances, timely review of the facilities, oversight on the improvement areas, etc.

b) No loan shall be sanctioned to borrowers whose ICRR is “Unacceptable” unless the loan is 100% cash covered or fully guaranteed by the Government or Multilateral Development Banks (MDBs) or the loan is for any state-owned organization or state-owned project. If the credit facility of the borrower is 100% cash covered or covered by government guarantee or bank guarantee, whatever rating the borrower gets, the rating will be “Excellent”.

c) For the quantitative and qualitative risk analysis, if the ICRR falls under “Marginal” or “Unacceptable” for any risk criteria (among 16 quantitative and 18 qualitative); whatever the aggregate score is, the relationship manager shall evaluate what would be the impacts of such risk on loan repayment and justify how those risks are mitigated; and in loan proposal the approval authority should review that justifications thoroughly and make necessary evaluations on it and should be documented in the loan file.

d) In deriving ICRR, whatever score a borrower gets in the qualitative part, if the score in the quantitative part is less than 50%, the borrower’s ICRR shall be "Unacceptable".

e) Bank can make renewal and enhancement of existing loans for maximum 2 (two) times if the borrower's ICRR is "Unacceptable".

f) In conducting qualitative analysis, justifications for all criteria are required to be documented.

g) Bank must maintain portfolio level data base for the asset base with "Excellent", "Good", “Marginal” and “Unacceptable” category and maintain risk appetite/tolerance level for portfolio.

### 2.6.7 Exceptions to Credit Risk Rating

a) For a newly established company with no meaningful financial statements, the bank can apply a rating based on the projected financial statements and the rating of the borrower shall not be better than Marginal. However, the bank must run the rating module once the full year audited financial statements become available reflecting customer's full-fledged business operation.

b) For the companies under large business conglomerate, rating substitution is allowed based on the rating of Corporate Guarantor of the performing concern of the same group or holding company. In case of rating substitution based on the corporate guarantor, the guarantee must be legally enforceable, irrevocable and unconditional. In this regard, a full-fledged ICRRS shall be conducted on the guarantor to determine whether the guarantor has the ability to support the borrower at the time of need. However, the rating substitution will no longer be required if borrowing entity's rating becomes eligible for acceptable grading. If corporate guarantee is required to continue then the ICRRS of both corporate guarantor of performing concern and the borrowing entity will be done.

c) Rating generation is discouraged using outdated financial statements (i.e. available audited financial statements are more than 18 months old). In exceptional cases where there is valid reason for delay in audited financial publication, out dated financial statements can be accepted only if up to date unaudited financial statement is submitted, but the rating shall not be better than "Marginal". In this case, the condition mentioned in para 1.10(a) is to be followed.

d) Rating shall be downgraded if there is any internal/external factors or information that have not been captured in the rating/financial statements (because they are post balance sheet events) having the material impact on the customer's business operation and loan repayment. A conservative and consistent approach should be used in employing judgments in the case of events like the death of key sponsor, prolonged factory shut down, deteriorating financial profile reported in interim financial statements, change in tax structure/duty, large expansions funded by debt, excessive leverage ratio, merger-acquisition, etc.

e) For the proprietorship & partnership concern where preparation of the audited financial statements is not mandatory, an unaudited financial statement can be used for rating generation but due diligence should be conducted on the accuracy of the financial statements with high-level checking of the bank statements recording the sales collection, stock/receivable position, peer analysis, bank liabilities, etc.

f) If the customer is in multiple lines of business, the most appropriate sector/industry shall be the line of business generating the highest portion of total revenue.

g) This guideline and enclosed model will be the minimum standard of risk rating; and banks may adopt more sophisticated risk rating model in line with the size and complexity of their business.

### 2.6.8 Credit Risk Rating Components

**Quantitative Indicators and Associated Weights**

Quantitative indicators in ICRR fall into six broad categories: leverage, liquidity, profitability, coverage, operational efficiency, and earning quality. Details indicators under these categories and associated weights are furnished below:

| Quantitative Indicators | | Weight | Definition |
|---|---|---|---|
| 1. Leverage (10%) | a) Debt to Tangible Net Worth (DTN) | 7 | Total Interest-Bearing Liabilities or Financial Debt/Total Tangible Net Worth |
| | b) Debt to Total Assets (DTA) | 3 | Total Interest-Bearing Liabilities or Financial Debt/Total Assets |
| 2. Liquidity (10%) | a) Current Ratio (CR) | 7 | Current Assets/Current Liabilities |
| | b) Cash Ratio (Cash) | 3 | Cash and Easily Marketable Securities/Current Liabilities |
| 3. Profitability (10%) | a) Net Profit Margin (NPM) | 5 | Net Profit after Tax/Net Sales |
| | b) Return on Assets (ROA) | 3 | Net Profit after Tax/Total Assets |
| | c) Operating Profit to Operating Assets (OPOA) | 2 | Operating Profit/Average Operating Assets |
| 4. Coverage (15%) | a) Interest Coverage (IC) | 3 | Earnings Before Interest and Tax/Interest Expense |
| | b) Debt Service Coverage Ratio (DSCR) | 5 | Earnings Before Interest Tax Depreciation Amortization/Debts to be Serviced |
| | c) Operating Cash Flow to Financial Debt Ratio (OCDR) | 4 | Operating Cash Flow/Financial Debt |
| | d) Cash Flow Coverage Ratio (CCR) | 3 | Cash Flow from Operation/Debts to be Serviced |
| 5. Operational Efficiency (10%) | a) Stock Turnover Days (STD) | 4 | (Total Inventory/Cost of Goods Sold)*360 |
| | b) Trade Debtor Collection Days (TDCD) | 3 | (Total Accounts Receivable/Sales)*360 |
| | c) Asset Turnover (AT) | 3 | Sales/Total Assets |
| 6. Earning Quality (5%) | a) Operating Cash Flow to Sales (OCFS) | 3 | Operating Cash Flow/Sales |
| | b) Cash Flow based Accrual Ratio (CFAR) | 2 | NI-(CFO+CFI)/Average Net Operating Assets |

**Qualitative Indicators and Associated Weights**

Qualitative indicators cover six broad aspects of the firms/institutions to be rated, namely business/industry risk, credit quality enhancement, performance behavior, management risk, relationship risk, and compliance risk. Noteworthy that aggregate weights against the qualitative indicators stands at 40 percent. Detail indicators and associated weights are appended below in details:

| **Principal Risk Components** | **Weight** |
|---|---|
| **1. Performance Behavior** | 10 |
| Performance Behavior with Banks Borrowings | |
| Regarding Classification | 5 |
| Regarding Rescheduling/Restructuring | 4 |
| Performance Behavior with Suppliers/Creditors | 1 |
| **2. Business and Industry Risk** | 7 |
| Sales Growth | 2 |
| Age of Business | 2 |
| Industry Prospects | 1 |
| Long-Term External Credit Rating of the Borrower | 2 |
| **3. Management Risk** | 7 |
| Experience of the Management | 2 |
| Existence of Succession Plan | 2 |
| Auditing Firms | 2 |
| Change of Auditors in Last 3 Years | 1 |
| **4. Security Risk** | 11 |
| Primary Security | 2 |
| Collateral | 2 |
| Eligible Collateral Coverage | 5 |
| Type of Guarantee | 2 |
| **5. Relationship Risk** | 3 |
| Account Conduct | 3 |
| **6. Compliance Risk** | 2 |
| Compliance with Environmental Rules, Regulations and Covenants | 1 |
| Corporate Governance | 1 |

**Generating Score**

After providing inputs to the balance sheet, profit and loss statement, cash flow statement and qualitative analysis, the detail management report and executive summary report will automatically be generated. In the detail management report and executive summary report, four color coding is used. The detail of the color coding is as follows:

| **Rating** | **Color** |
|---|---|
| Excellent | Green |
| Good | Blue |
| Marginal | Yellow |
| Unacceptable | Red |

The analyst should meticulously review all color coding and rating. For the quantitative and qualitative risk analysis, if the ICRR falls under "Marginal" or "Unacceptable" for any risk criteria (among 16 quantitative and 18 qualitative); whatever the aggregate score is, the relationship manager shall evaluate what would be the impacts of such risk on loan repayment and justify how those risks are mitigated; and in loan proposal the approval authority should review that justifications thoroughly and make necessary evaluations on it and should be documented in the loan file. In the executive summary report, the movement of the key quantitative indicators for last three years is also disclosed.

## 2.7 Indicative Questions

1. State the activities associated with credit operations of a bank.
2. Draw a diagram showing the different stages of credit operations.
3. What are the functions of the relationship manager (RM) of a bank?
4. What are the functions of the credit administration department (CAD) of a bank?
5. What are the functions of the recovery unit (RU) of a bank?
6. Discuss the principles of sound lending. How do you select a good borrower?
7. Show the borrower selection process with the help of a flow chart.
8. What are the financial statements that should be obtained from the business borrowers?
9. What are the different categories of assets and liabilities that are reported in the balance sheet of an organization?
10. What are the different techniques or tools of financial statement analysis?
11. What are the different categories of ratios that are commonly used in case of borrower analysis?

12. Why is ICRR important for selecting the right borrower?

13. What are the parameters of measuring quantitative risk?

14. What are the exceptions to ICRR?

15. Which types of loans/exposures are not applicable for ICRR?

# Module – C
# Term Loan and Working Capital Financing

## 3.1 Appraisal of Term Lending

Credit appraisal process is an essential tool for investment decision and project selection. It is the prime step in the process of decision making in respect of sanctioning of assistance by financial institutions. However, credit appraisal may be defined as a detailed evaluation of the credit proposal to determine the technical feasibility, economic necessity, marketing prospect, financial viability of the project and managerial competence required for its successful operation. The main objectives of credit appraisal are:

a) To decide whether to accept or reject the investment proposal.
b) To recommend, if it is not designed properly, in which way it should be redesigned or formulated so as to ensure better technical, financial commercial and economic viability.

Thus, credit appraisal assists to ascertain expected rate of return of the investment. It enables a person to select the proposal, which will be best suited to him in view of its managerial, financial, technical and socio-economic aspects

"Credit appraisal", in simple terms, means pre-investment analysis of an investment proposal with a view to determining, its commercial and socio-economic feasibilities i.e. to examine as to whether a proposed project which is going to take up for implementationand finance is

- commercially profitable,
- economically viable and at the same tune.
- socially desirable.

## 3.2 Importance of Credit Appraisal

- **From the viewpoint of Bank/Financial Institution**
  - ✓ Identification of right borrower with acceptable level of credit risk
  - ✓ Evaluation of the commercial, technical, and socio-economic feasibility of a project
  - ✓ Compliance with banking and legal laws of the country
- **From the viewpoint of the Borrower**
  - ✓ Being sure about the overall viability of a project to be undertaken.

- ✓ A way to receive suggestions to improve any shortcomings of the project.

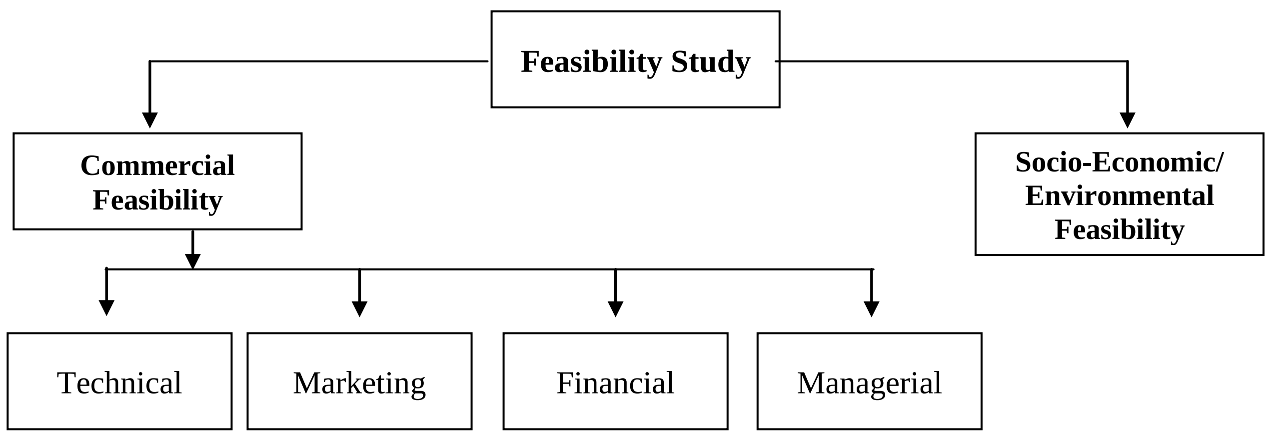
- **From National Point of View**
  - ✓ Optimum utilization of resources
  - ✓ Achievement of national objectives.

## 3.3 Different Aspects of Credit Appraisal

The main task of the appraisal exercise is to justify the soundness of an investment proposal by the financier by means of a critical and systematic analysis of different elements of a credit proposal. There are various techniques available for appraising or evaluating a particular credit proposal. Generally financial institutions apply following techniques and feasibility tests to evaluate a particular credit proposal;

- Managerial Aspect
- Organization Aspect
- Technical Aspect
- Marketing Aspect
- Financial Aspect
- Socio-Economic Aspect
- Environmental Aspect

The whole appraisal exercise can therefore, be demonstrated in the following way




### 3.3.1 Managerial Aspect

In creditproposal one should describe proposed arrangement for executive management of the concern both during the construction period and for regular operations thereafter. Appraisal report also includes the particulars of proposed key technical, administrative and accounting personnel.

If the management is incompetent even a good project may fail. It is rightly pointed out that if the project is weak, it can be improved upon, but if the promoters are weak and lack business acumen, it is difficult to correct the situation. It is therefore, natural that the financial institution very carefully appraises the managerial and organizational aspects before sanctioning assistance for a project. For managerial and organizational appraisal, it is necessary to evaluate the following matters**:**

***Academic Qualification:*** Many would consider that at least for engineering construction projects the project manager or the promoter should possess a basic degree in engineering. That is the education will be related to the proposed project. There is no argument with this point that a project manager must have basic education in the related field. Real education is supposed to change the mental makeup of a man, his outlook towards life and things around him, in short, his commitment. So, with the academic education a manager or the promoter must have the real education in the particular field.

***Business and Industrial Experience:*** For successful management of the project and the project capital the promoter or the manager is needed to be experienced. So, for project appraisal the identification of experience of the promoter is an important factor, with this, in addition the banker must examine the promoters

- Family background
- Training acquired
- Reputation in the society
- Technical competence
- Knowledge of labor law, factory laws
- Honesty, integrity and resourcefulness

***Managerial Ability:*** Managerial ability is the possession of some necessary skills by the manages or management team of a project to **-**

- Prepare suitable plans,
- Formulate appropriate policies,
- Organize production,
- Handle customers,
- Direct employees,

- Maintain proper coordination among different Factors of production,
- Control and motivate employees' etc.

***Skills of the Manager and Management Team:*** The skills to be possessed by the manager or the management team include the following:

- Technical-Operational Skill
- Human Skills
- Conceptual Skills

***Past Performances of the Promoter:*** For providing financial assistance it is very much important to evaluate or appraise the past performance of the project manager or the promoters. Here the financial institutions evaluate

- The behavior of the promoter with the financial institution.
- The loan repayment attitude
- Whether the promoter is a defaulter or not. If he is a defaulter thenwhat is the cause of becoming so.

***Management Soundness***

- Do the top managerial personnel possess sufficient experience in the line of production in which the project falls?
- Has the supervisory staff been chosen with exclusive consideration of expertise and ability?
- Has due balance been maintained in the implement of supervisory staff and production workers?
- Has the organizational structure divided in a way that interdepartmental coordination becomes easy?

### 3.3.2 Organizational Aspect

Organizational aspect explains the ownership structure of the entity. While analyzing the borrower's business structure, it is important to understand the organizational structure of the business. From ownership structure, an entity can be segregated as per following types:

- Proprietorship Concern
- Partnership Concern
- Private Limited Company
- Public Limited Company

### 3.3.3 Technical Aspect

The importance of technical appraisal in project evaluation needs no exaggeration. Technical appraisal of a project broadly involves a critical study of the following:

- ***Location and Site:***The problem of selection of the location is complicatedby the fact that a particular location where one or a few factors are favorableother factors may be unfavorable. Selection of the optimum location, therefore, revolves around the joint consideration and evaluation of the following factors:
  - ✓ Raw materials supply.
  - ✓ Proximity of markets.
  - ✓ Transportation facilities.
  - ✓ Power and Fuel supply.
  - ✓ Water and Manpower.
  - ✓ Natural and climate Factors.
- ***Size (Plant Capacity):*** The size of the plant or scale of operation is an important factor that determines the economic and financial viability of a project. The size should be optimal; otherwise it will lead to diseconomies of scale.
- ***Technology, Plant and Equipment:***The feasibility study should also consider some important technological factors which regard to plant and equipment viz;
  - ✓ Adequacy and suitability of the plant and equipment and their specifications.
  - ✓ Plant layout
  - ✓ Balancing of different sections of the plant.
  - ✓ Reputation of the machinery supplies etc.
- ***Building and layout:*** The operative efficiency of an industrial project also depends on the layout. Layout refers to the arrangement of physical facilities. The site, factory and plant layouts are important. All these layouts shall ensure that the operations are carried out smoothly and efficiently. They shall also ensure safety.

The following questions will be answered while assessing the technical feasibility:

- Is the engineering design of the project sound?
- Has the size of the project plant that is, the proposed scale of operation been determined on a correct assessment of the requirement of the industry vis-à-vis market size?
- Has due consideration been given to alternative production process?
- Are the inputs needed by the project available at reasonable costs?
- Is the location of the project bringing maximum economic advantage?

### 3.3.4 Marketing Aspect

The most critical segment of project feasibility analysis is the marketing plan. Through this the company assesses the opportunities and threats in the environment, and develops strategic responses that ultimately lead it to its set objectives. The objective of market analysis is to see how much of these goods or services the community is disposed to acquire and at what prices.

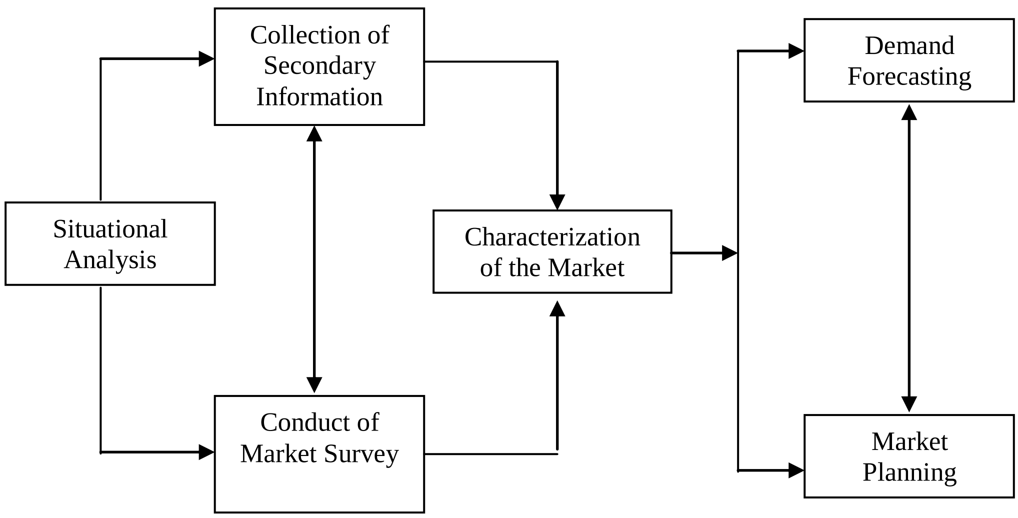
**Marketing Analysis: Why?**

- To analyze the aggregate demand of the proposed products/services in the future
- To estimate the market share of the project under appraisal

**Marketing Analysis Generally Address the following Issues:**

- A brief description of the market
- Analysis of the past and present demand and supply
- Estimate future demand of the product
- Estimate projects share of the market
- Analyze structure of the competition and elasticity of demand
- Information about consumer behavior, intentions, attitudes, preferences and requirements
- Determine distribution channel and marketing policies in use

The following diagram shows steps involved in a marketing analysis.



***Market and Demand Analysis***

- Situation Analysis & Specification of Objectives
- Collection of secondary Information
- Conduct of Market Survey
- Characterization of the Market
- Demand Forecasting
- Marketing Plan

***Situation Analysis***

- Cost consideration
- Time consideration

***Collection of Secondary Information***

Secondary information provides the base and the starting point for the market and demand analysis.

***Conducting Market Survey***

- Sample survey
- Census Survey

***Characterization of the Market***

Based on the information gathered from primary and secondary sources; the market for the product, service or ideas may be described in terms of the following -

- Effective Demand for the Past and Present
- Break down of Demand
- Price
- Methods of Distribution and Promotion
- Consumers
- Supply and Competition
- Govt. Policy

***Demand Forecasting***

- Qualitative Methods
- Quantitative Methods

***Marketing Plan***

- Executive Summary and Table of Contents
- Current Marketing Situation (SWOT Analysis)
- Opportunities and Issue Analysis
- Objectives
- Marketing Strategies
- Action Program
- Financial Projection
- Implementation Control

Two considerations are taken into account while analyzing the marketing aspect.

- **Company's external or macro-environment:** Industry and competitive conditions
- **Company's internal or micro-environment:**Competencies, capabilities, resource strengths and weaknesses, and competitiveness

***Industry Analysis:***The main objective of the industry analysis is to identify the main sources of competitive forces that lie within the industry and strength of these forces. The key analytical tool is the 'Portars' five forces model of competition which is:

- Assess strength of each of the five competitive forces (Strong? Moderate? Weak?)
  - ✓ Rivalry among competitors
  - ✓ Competition from substitute products
  - ✓ Competitive threat from potential entrants
  - ✓ Bargaining power of suppliers and supplier-seller collaboration
  - ✓ Bargaining power of buyers and buyer-seller collaboration
- Explain how each force acts to create competitive pressure.
- Decide whether overall competition (the combined effect of all five competitive forces) is brutal, fierce, strong, normal/moderate, or weak

***Company Analysis:***The important tool that is used to analyze the company competitiveness is SWOT analysis. SWOTrepresents Strengths, Weaknesses, Opportunities and Threats. For a company's strategy to be well conceived, it must be matched to both

- Resource strengths and weaknesses
- Market opportunities and external threats to its well being

While assessing the marketing feasibility, the following questions need to be answered:

- Are there adequate possibilities for surviving the project in view of the consumer's needs, production, and distribution of the product to be produced by the project?
- Has the demand for the produce(s)/product(s) of the project been duly assessed taking into consideration all the factors which affect the said damned both favorable as well as adversely?
- Whether supply analysis of the produce(s)/product(s) of the project have been made properly?
- Have the size of the market for the produce(s)/product(s) of the project as well as the maximum share of those produce(s)/ product(s) that might have in the said market been determined properly from the interaction of the demand for and supply of the produce(s)/product(s) of the project in question?
- Whether the size of the plant is enough to supply the required quantity to cope with the gap that exists in between the demand for and supply of the produce(s) product(s) of the project.
- Will there be any major risk for marketing the produce(s)/product(s)?

### 3.3.5 Financial Aspect

The main purpose of financial appraisal is

- To assess if the proposed project is viable in terms of its operation in the future years and its financial soundness.
- To see whether the project will be able to generate sufficient cash flow after meeting all operating costs and other day to day transactions to meet its long-term debt obligations.

The financial appraisal of a project thus covers the following aspects:

- Preparation of Financial Statements: Income Statement and Balance Sheet
- Analysis of Income Statement and Balance Sheet
- Analysis of Cash flow Statement
- Financial Projection and Preparation of Projected Financial Statements
- Cost-Volume-Profit Analysis
- Cost of the Project and Means of Financing
- Capital Budgeting Techniques
- Sensitivity Analysis

Financial appraisal also looks into the following issues:

- Are the cost estimates exhaustive and realistic? How is the project proposed to be financed? Is the proposed capital structure financially satisfactory?
- Has adequate provision been made for meeting the working capital requirements?
- Does the proposed current asset structure ensure adequate liquidity?
- Will the project generate sufficient cash flows to cover its debt servicing liabilities?
- Will the project earn sufficient profit for its owners or sponsors?

**3.3.6 Socio-EconomicAspect**

In case of certain projects like irrigation projects, power projects, transporting projects, or other infrastructures projects national profitability or the net socio economies benefits consideration are as important as, and sometimes more important than, commercial profitability considerations. For evaluation of national or socio-economic benefits, the following aspects are generally considered:

- Opportunity cost
- Shadow prices
- Generation of employment
- Income distribution
- Self-reliance
- Development of small Scale and ancillary industries
- Improvement of infrastructure
- Improvement of quality of life and well-being of the society etc.

**3.3.7 Environmental Aspect**

One of the basic flaws in project planning and design is the complete neglect orminimal consideration of environmental and social costs and dependence only on economicanalysis for project preparation and investment. A failure to understand and internalize adverse or negative impacts on environment during project preparation could lead to severalundesirable consequences, which may ultimately jeopardize the very objectives of growthand development for which the project was proposed.It is argued that sound environment management reduces the unforeseenobstacles and bottlenecks that may otherwise hamper the delivery of project objectives whilehelping to improve the environmental performance of project operations.

The key environmental issues resulting from agricultural, mining, manufacturing, andurban operations include:

- severe degradation of air quality due to industrial and vehicular pollution
- contamination of land and water resources due to pesticides, chemical, fertilizers, and dumping of hazardous wastes
- depletion of mineral reserves
- contamination of surface and ground water sources due to discharge of sewage and industrial effluents
- deforestation

Environmental impact assessment (EIA) study is suggested as a tool for formulating anenvironment management plan. EIA should, however, not be treated just as a tool for regulatory compliance but as an instrument for improving project management with properexpertise, time, and budget allocations made for the purpose.

### 3.3.8 Environmental and Social Risk Management Guideline

Environmental Risk Management is for assessing environmental risks and not intended to squeeze investment; rather it is for sustainable finance. Environment management in the banking business is like risk management. It increases the enterprise value and lowers loss ratio as higher quality loan portfolio results in higher earnings. Bangladesh Bank published first Policy Guidelines for Green Banking and Environment Risk Management in 2011. The financial sector as a whole could not comply with the implementation deadline with initial difficulties in applying those but has come forward under the umbrella of BB to promote and support green banking in Bangladesh. Traditionally, banking sector's concern for environmentally degrading activities of clients is like interfering or meddling in their business affairs. However, now it is being perceived that environmental hazard brings risks to their business. Although the banking and financial institutions are not directly affected by the environmental degradation, there are indirect costs to banks. Due to strict environmental disciplines imposed by the competent authorities across the countries, the industries would have to follow certain standards to run their business. Credit risk can arise indirectly where banks are lending to customers whosebusinesses are adversely affected by the cost of cleaning up pollution or due to changes inenvironmental regulations. Credit risks are alsoassociated with lending on the security of real estate whose value has diminished owing toenvironmental problems (additional loss in the event of default).

Guidelines on Environmental Risk Management[1]was prepared and circulated by BB on January 30, 2011 to support Policy Guidelines for Green Banking (2011)featuring qualitative assessment of environmental risks for the financial sector. This guideline, developed with the assistance of IFC, covers different conceptual aspects, applicability and benefits of ERM along with organizational requirements, technical manual and technical annexes forthe financial sector in a consultative manner.

The ERM guideline prescribes a set of sectors specific 'Environmental Due-diligence Checklist'[2] for financing environmentally sensitive sectors[3] by banks.Banks/FIs should conduct a preliminary environmental risk review on each credit proposal using Environmental Due Diligence (EDD) checklists. There is one General EDD checklist, ten Sector EDD checklists and a Guidance Matrix. Potential borrowers will have to submit various documents to the DOE for obtaining the Environmental Clearance Certificate. Banks/FIs need to obtain copies of these documents as the background for completing the EDD checklists. The outcomes of both the General and Sector specific EDD checklists are combined in the Overall Environmental Risk Rating(EnvRR). Finally, it is a 'yes' or 'no' decision for financing the proposed credit based on subjective judgment of 'High' 'Low' or 'Moderate' EnvRR.

For 'High' EnvRR the credit risk management should ensure that additional conditions/covenants are included. The EnvRR should be considered along with the overall credit risk rating of a proposed credit for financing decision.Environmental Risk Rating are required for all individual customers (corporate, institutional, personal, small and medium enterprise) whose aggregate facilities are above BDT 2.5 million for SME, financing; BDT 10 million for Corporate, financing and BDT 10 million for Real estate financing.

[1]BB BRPD Circular No-1, January 30, 2011

[2] In this guideline Bangladesh bank designed 14 environmental due diligent checklists. One for general and other thirteen are sector specific. Among the thirteen sectors, six are included in red category and six in orange category in the environmental conservation act 1995. In this due diligent checklist BB focused on applicable environmental compliance certificate, location of land, protection against climate change impact, top management commitment to environmental management, potential borrower's planning to address environmental issues, manpower's skill in addressing environmental issue, solid waste management, air emissions prevention and control measures systems, ETP and waste water management, labor and social issues etc. are considered.

[3]Agri-business, cement, chemicals, housing, engineering and basic metals, pulp and paper, tannery, Sugar and distilleries, textile and apparels, and ship-breaking.

## 3.4 Cost of the Project and Means of Financing

To assess a project from the financial point of view, information about project cost, financing source, profitability, tax burden and projected financial condition is very important. The cost of a project represents all capital expenditure to be incurred for acquisition of its fixed assets plus the net contribution of long-term resources in the proposed current assets. In other words, the fixed cost of the project plus the net working capital requirement to run the project will comprise its total cost. Once the cost is estimated, the financing plan will have to be worked out on realistic basis.

Factors Determining the Cost of the Project

- Size of the project
- Duration of the project
- Ability to complete project within specified time period
- Nature of the project

**Components of Project Cost**

The requirement of physical assets for a project is essentially an engineering estimate. The analyst should, however, recheck the various cost items detailed in the fixed cost statement given in the technical report. Cost of the project represents the sum of all items of outlay of a project. Although it seems to be a simple term, it conveys different meaning to different part of the organization. The following could be the possible components of a project cost

- Land and site development cost
- Cost of the building and civil works
- Cost of the plant and machinery
- Technical know-how fees
- Expense on foreign technicians and cost of training
- Miscellaneous fixed assets
- Preliminary and capital issue expense
- Pre-operative expense
- Interest during construction period
- Contingency
- Margin money for working capital

***Land and Site Development:***The total cost of land should include the purchase consideration, cost of reclamation and improvement, payment for legal expenses, relevant tax expense, premium payable on the leasehold assets, cost of laying approach roads and internal roads and also any other cost needed to make the land ready for the project. In other words, all expenses incurred that add to the value of land should be included in the cost of land. However, in all cases of assessing the value of land, it has to be done very carefully and judiciously so as to avoid over-estimation or under-estimation of the value of land.

***Cost of Building and Civil Work:***The cost under this head should include those incurred and to be incurred for excavation, foundation, construction for of main factory building, cost for auxiliary services like substation, pump-house, laboratory, warehouse, garage, labor-shed, miscellaneous non-factory building like canteen, guesthouse and cost of setting utility services.

***Cost of Plant and Machinery:***The major cost item in most of the projects are (i) imported machinery, (ii) local machinery, (iii) machinery stores and spares, and (iv) foundation and installation charges. The cost of imported machinery includes (i) FOB value, (ii) L/C commission, (iii) import duty, and (iv) C&F charge, loading & unloading charges and transportation charges. For local machinery the cost component includes (i) purchase price including VAT and other taxes, (ii) transport cost to the site. Finally installation and testing of machinery consists of (i) mechanical, electrical and civil, (ii) assembling cost, and (iii) cost of testing after installation.

***Technical Know-how Fees:***The technical know-how and engineering fees payable to foreign/local technical collaborators is considered here. Recurring annual royalty payment is not considered here, which should be included in the profitability statement.

***Expenses on Foreign Technicians and Cost of Training Local Technician Abroad:*** Foreign technicians may be required during project implementation and trial runs. Expenses on their travel, boarding, lodging, and their remuneration need to be considered. Expenses on Bangladeshi technician who requires training in both home and abroad must also be included.

***Miscellaneous Fixed Assets:***The cost of miscellaneous fixed assets generally includes furniture, office equipment and machinery, transport, computer, fax, telephone, firefighting and first aid equipment. This also should include the costs of patents, licenses, goodwill, trademarks, copyright, formula, etc., wherever applicable.

***Preliminary and Capital Issue Expense:***Many expenses relating to the formation of the company incurred prior to commencement of operation of the project are not represented by any physical assets. Some of such expenses are related to company documentation, registration, lawyer, auditor, and expenses related to the commencement of the business. These preliminary expenses are part of the project and hence they are capitalized. The capital issue expenses include (i) brokerage, underwriting commission and fees of manager to the issue (ii) other cost necessary to raise capital like legal, advertising, printing and stationary.

***Pre-operative Expenses:***These are expenses incurred on the following till the date of commencement of commercial production: (i) establishment expenses including salary to the staffs, (ii) rent, rates and taxes, (iii) traveling expenses, (iv) Insurance, (v) mortgage related expenses, (vi) experimental production cost, and (vii) interest during construction period.

***Contingency:***Price escalation alone cannot explain the over-run in the cost of project. It may be due to under-estimation of cost at the time of appraisal. The need for creating contingency provision arises to meet the various small cost, which cannot be visualized properly A provision for contingency is made to provide for certain unforeseen expenses and probable future increase in prices. Generally, a provision of 5% to 10% of the estimated project cost is maintained to cover the uncertainties.

***Margin Money for Working Capital:***Apart from investment in the fixed assets, liquid funds are necessary for investment in current assets, which is known as working capital. The margin money for working capital required for stocks of raw materials, goods-in-process, finished goods, stores and spares, outstanding debtors, wages and salaries, cost of repair and maintenance and other items of working capital.

## Means of Financing a Project

To meet the cost of the project the following sources of finance may be utilized:

### *Equity Financing*

- Fund provided by the sponsors

- Issue of ordinary shares: This is the contribution made by the ordinary shareholders, who enjoy the rewards and bear the risks of ownership. However, the liability is limited to their capital contribution.
- Issue of preference shares: A hybrid form of financing. Preference capital partly takes some characteristics of equity capital and some attributes of debt capital. It is similar to equity because preference dividend like is not a tax-deductible payment. It resembles debt capital because the rate of preference dividend is fixed.

***Debt Financing***

- Term Loans: Term loans, which represent secured borrowing, are presently the most important source of finance for new projects. They carry fixed rate of interest and are repayable over a period of 6 to 10 years in periodic installments.
- Debt Instruments: Bonds and Debentures, a kind of promissory notes, are debt instruments for raising long-term debt capital. Secured instruments are protected by a charge on the properties of the issuing company.
- Deferred payment/suppliers' credit: Generally, suppliers of the machinery provide deferred credit facility under which payment for the purchase of machinery can be made over a period of time. The interest rate on deferred credit and the period of payment vary rather widely. Normally, the supplier of machinery when offers deferred credit facility insists that the buyer should furnish the bank guarantee.

**Sample Format for Estimating the Cost of the Project:**

| | Cost Already Incurred | Cost to be Incurred | Grand Total |
|---|---|---|---|
| 1. Land and Site Development<br>a. Cost of ____ hectares of freehold land acquired/ proposed to be acquired at Tk._____ per hectare.<br>b. Premium payable on leasehold land (______ hectares at Tk._______ per hectare)<br>c. Cost of traveling and development of _______ hectares of land at Tk._______ per hectare.<br>d. Cost of laying roads<br>(i) Approach road connecting the factory site to main road ____ km of (type of construction) at Tk._______ km<br>(ii) Internal road for the factory ______ km of (type of construction) at Tk._______ km<br>(iii) Cost of fencing/boundary wall<br>(iv) Cost of gates (No. of gates) | | | |
| 2. Buildings and civil works<br>a. Factory building for the main plant and equipment<br>b. Factory building for auxiliary services like steam supply, water supply, laboratory, workshop etc.<br>c. Administrative building<br>d. Warehouse, excise house garage, labor shade etc.<br>e. Quarters of essential staff<br>f. Construction of infrastructure necessary for installation of plant and equipment and which may be constructed in RCC and such other structural civil engineering materials.<br>g. Cost of sewerage, drainage etc.<br>h. Architect fees<br>i. Other construction related costs | | | |
| 3. Plant and Machinery<br>a. Imported<br>(i) FOB value<br>(ii) Shipping freight and insurance (___% of i)<br>(iii) Import duty<br>(iv) L/C margin<br>(v) Clearing, loading, unloading and transport charges to factory site<br>b. Indigenous<br>(i) Purchase cost<br>(ii) Sales tax (____ %) and other taxes if any<br>(iii) Transport charges and other costs<br>c. Machinery stores and spare parts<br>d. Installation charge on imported and indigenous machinery | | | |

| | Cost Already Incurred | Cost to be Incurred | Grand Total |
|---|---|---|---|
| 4. Technical know-how fees and expenses on drawing etc. payable to technical collaborators<br><br>5. Expenses on foreign technicians<br>6. Training of Bangladeshi technicians (home and abroad)<br><br>7. Miscellaneous Fixed Assets<br>a. Furniture<br>b. Office machinery and equipment<br>c. Office transport<br>d. Laboratory, workshop and fire fighter equipment<br>e. Effluent collection, treatment and disposal arrangement<br>f. All other necessary expenses<br><br>8. Preliminary and capital issue expenses<br>a. Brokerage and commission on capital<br>b. Other capital issue expense (legal, advertising, printing, stationary etc.)<br>c. Other preliminary expenses (company flotation and other initial expenses)<br><br>9. Pre-operative expenses (from _______ date) to _____ date of commencement of commercial production.<br>a. Establishment<br>b. Rent, rates and taxes<br>c. Insurance expenses<br>d. Mortgage expenses (stamp duty, registration charge and other legal expenses)<br>e. Interest during construction period<br>f. Startup expense<br><br>10. Provision for contingencies (detail)<br><br>11. Margin money for working capital | | | |
| **Total Cost** | | | |

## 3.5Capital Budgeting Techniques

Capital Budgeting is the process of planning expenditures on assets whose cash flows are expected to extend beyond one year.Capital budgeting refers to the investment decision involving fixed asset of a firm.The term capital refers to the fixed assets used in production and budget is a plan that details projected inflows and outflows during some future periods.Thus, capital budget in an outline of planned expenditures on fixed assets and capital budgeting is the process of analyzing projects and deciding which are acceptable projects.

### 3.5.1 Steps Involved in Capital Budgeting

- Determine the cost, or purchase price, of the asset.
- Estimate the cash flows expected from the asset.
- Evaluate the risking of the projected cash flows to determine the appropriate rate of return to use for the present value of the estimated cash flows.
- Compute the PV of the expected cash flows.
- Compare the present value of the expected cash inflows with initial investment, or cost, regard to acquire the asset.
    - ✓ If a firm invests in a project with a present value greater than its cost, the value of the firm will increase.
    - ✓ The more effective the firm's capital budgeting procedures, the higher the price of its stock.

### 3.5.2 Time Value of Money

Time value of money refers to the fact that money received soon is worth more than money expected in the distant future, because the sooner money is received, the sooner it can be invested to earn a positive return. The trade-off between money now and money later thus depends on, among other things, the rate that can earn by investing.

| | |
|---|---|
| Future Value: | The amount an investment is worth after one or more periods. |
| Compounding: | The process of accumulating interest on an investment over time to earn more interest. |
| Present value: | The current value of future cash flows discounted at the appropriate discount rate. |
| Discount: | Calculate the present value of some future amount. |

**Example: Future Value**

Suppose you deposited Tk. 100 in a savings account that pays 10% interest per year. How much would you have at the end of one year?

$$FV = 100 + 10 = 100 + 100 \times 10\% = 100(1 + 10\%) = PV(1 + i)$$

If the total amount after one year is deposited for another year with same interest rate then

$$FV = PV(1 + i) = 110 \times 1.1 = (100 \times 1.1) \times 1.1 = 100 \times (1.1 \times 1.1) = 100 \times (1.1)^2 = PV(1 + i)^2$$

So future value of the investment for n periods at a rate i percent per period is

$$FV = PV(1 + i)^n$$

The expression $(1 + i)^n$ is sometimes called future value interest factor for Tk.1 invested at i percent for t periods and can be expressed as FVIF(i, n).

Problem: PV = Tk 1000; i = 8%; n = 10 years; FV = ?

Answer: $FV_{10} = 1000 (1 + 0.08)^{10} = 1000 \times 2.15892$ = Tk. 2158.92

**Example: Present Value**

The present value of a cash flow due n years if it were on hand today, would grow to equal the future amount. Finding PV is called discounting. It is simply the reverse of compounding.

$$PV = \frac{FV}{(1 + i)^n}$$

the term $[1/(1 + i)^n]$ is often called discount factor or present value interest factor for Tk.1 invested at i percent for t periods and can be expressed as PVIF(i, n).

Problem: What is the present value of Tk. 2158.90 be paid at the end of year 10, if i = 8% p.a.

Answer: $PV = 2858.92 \times \frac{1}{(1 + 0.08)^{10}} = 2158.92 \times 0.4632 = \text{Tk.}1000.00$

### 3.5.3 Techniques of Capital Budgeting

The basic methods we will discuss are:

(1) Payback period (PBP)

(2) Discounted Payback period (DPBP)

(3) Net Present Value (NPV)

(4) Benefit Cost Ratio (BCR)

(5) Internal Rate of Return (IRR).

### 3.5.3.1 Payback Period (PBP)

- Payback period is defined as the length of time or expected member of years required to recover the original investment.
- To compute a projectpayback period, simply add up the expected cashflow for each year until the commutative value is equal to the total amount initially invested.

**Example:** Cash flows for projects A and B are as follows. Calculate the payback period for projects A and B

| Year | Expected cash flows (CFs) | |
|---|---|---|
| | Project A | Project B |
| 0 | Tk. (3,000) | Tk. (3,000) |
| 1 | 1,500 | 400 |
| 2 | 1,200 | 900 |
| 3 | 800 | 1,300 |
| 4 | 300 | 1,500 |

Project A:

| Year | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Net cash flow | -3,000 | 1,500 | 1,200 | 800 | 300 |
| Cumulative net cash flow | -3,000 | -1,500 | -300 | 500 | 800 |

Project B:

| Year | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Net cash flow | -3,000 | 400 | 900 | 1,300 | 1,500 |
| Cumulative net cash flow | -3,000 | -2,600 | -1,700 | -400 | 1,100 |

The exact period can be found using the following formula:

$$\text{Payback} = \begin{pmatrix} \text{Years before full recovery} \\ \text{of original investment} \end{pmatrix} + \left( \frac{\text{Unrecovered cost at start of full recovery year}}{\text{Total cash flow during full recovery year}} \right)$$

$$\text{For Project A,} \quad \text{Payback} = 2 + \frac{300}{800} = 2.4 \text{ years}$$

$$\text{For Project B,} \quad \text{Payback} = 3 + \frac{400}{1500} = 3.27 \text{ years}$$

In general, a project is considered to be acceptable if its payback is less than the maximum cost recovery time established by the farm. For example, if the firm requires projects to have a payback of three years or less, Project A would be acceptable but Project B would note.

The payback method is very simple but ignores the time value of money. The cash flows beyond the payback period are also ignored. A project may have greater cash flow in later years, which would make it more preferable.

### 3.5.3.2 Discounted Payback Period (DPBP)

The discounted payback period is the length of time until the sum of discounted cash flows is equal to the initial investment. Based on the discounted payback rule, an investment is acceptable if its discounted payback is less than some pre-specified number of years.

Example: Calculate the discounted payback period for projects A with discount rate 10%

| Year | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Cash Flow | -3,000 | 1,500 | 1,200 | 800 | 300 |
| Discounted Cash Flow | -3,000 | 1363.64 | 991.74 | 601.05 | 204.90 |
| Cumulative net cash flow | -3,000 | -1636.36 | -644.62 | -43.57 | 161.33 |

$$\text{For Project A,}\quad \text{Discounted Payback} = 3 + \frac{43.57}{204.90} = 3.2 \text{ years}$$

Discounted payback is better than the ordinary payback because it considers time value. The ordinary payback does not take this into account. But discounted payback period rule has a couple of other significant drawbacks. The biggest one is that the cutoff still has to be arbitrary and cash flows beyond that point are ignored.

### 3.5.3.3 Net Present Value (NPV)

Net present value (NPV) is a measure of how much value is created or added today by undertaking an investment. Given our goal of creating value for the shareholders, the capital budgeting process can be viewed as a search for investments with positive net present values.

NPV relies on discounted cash flow (DCF) techniques, which is the process of valuing an investment by discounting its future cash flows. NPV is computed using the following equation:

$$\text{NPV} = \frac{CF_1}{(1+k)^1} + \frac{CF_2}{(1+k)^2} + \cdots\cdots + \frac{CF_n}{(1+k)^n} - I_0 \quad = \sum_{t=1}^{n} \frac{CF_t}{(1+k)^t} - I_0$$

$I_0$ = Initial Investment

$CF_t$ = Expected net cash flow at period t

k = Rate of return required by the firm (generally the firm's cost of capital) to invest in the project

n = The projects duration in years

An NPV of zero signifies that the project's cash flow is just sufficient to repay the investment capital and to provide the required rate of return on that capital, which is k.

If a project has a positive NPV, then it generates a return that is greater than is needed to pay for the funds provided by investors. Therefore, the firm's value will be improved.

Example: Considering project A when k = 10%

| | 0 | K = 10% | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| | (3,000) | | 1,500 | 1,200 | 800 | 300 |
| Cash flow | 1,363.64 | | | | | |
| | 991.74 | | | | | |
| | 601.05 | | | | | |
| | 204.90 | | | | | |
| $NPV_A$ = | Tk. 161.33 | | | | | |

Using the formula:

$$NPV_A = \frac{1{,}500}{(1.1)^1} + \frac{1{,}200}{(1.1)^2} + \frac{800}{(1.1)^3} + \frac{300}{(1.1)^4} - 3000 = \text{Tk.}161.33$$

Similarly, project B's $NPV_B$ = Tk. 108.67

**Decision Criteria**

If NPV >0, the project should be accepted.

If NPV <0, the project should be rejected.

If NPV = 0, the firm would be indifferent to the project.

NPV >0, if DCF $>CF_{o.}$

### 3.5.3.4 Benefit Cost Ratio (BCR)

Another tool used to evaluate projects is called the profitability index (PI) or benefit cost ratio. This index is defined as the present value of the future cash flows divided by the initial investment. More generally, if a project has a positive NPV, then the present value of the future cash flows must be bigger than the initial investment. The profitability index would thus be greater than 1 for positive NPV investment and less than 1 for a negative NPV investment.

$$\text{PI} = \frac{\text{PV of Cash Inflow}}{\text{Initial Investment}}$$

For example, project A costs Tk.3000 and the present value of its future cash flows is 3166.33, the profitability index value would be 3166.33/3000 = 1.06

Profitability index measures the value created for per taka invested. In our example, PI is 1.06. This tells us that, investing Tk.1 the value created is Tk.1.06

### 3.5.3.5 Internal Rate of Return (IRR)

The internal rate of return (IRR) is defined as the discount rate that equates the present value of the initial investment outlays to the present value of the future cash inflows. In other words, IRR is the discount rate that equates the NPV of an investment opportunity with zero. IRR is calculated as follows.

$$\frac{CF_1}{(1+IRR)} + \frac{CF_2}{(1+IRR)^2} + \frac{CF_3}{(1+IRR)^3} + \cdots\cdots\cdots + \frac{CF_n}{(1+IRR)^n} = \text{Initial Investment}(I_0)$$

$$\Rightarrow \sum_{t=1}^{n} \frac{CF_t}{(1+IRR)^t} - I_0 = 0$$

IRR from the above-mentioned formula requires a “trial and error” solution for investment projects whose cash flows are received over a period of years. The computational procedure is as follows

- Given the cash flow and investment outlay, choose a discount rate at random and calculate the project’s NPV.
- If the NPV is positive, choose a higher discount rate and repeat the procedure.
- If the NPV is negative, choose a lower discount rate and repeat the procedure.
- Find the discount rate, which makes the NPV = 0 is the IRR.

**Example: Calculation of IRR for a Hypothetical Project**

When discount rate is 10%

| Year | Net Cash Flow | Discount Factor | PV of Cash Flow |
|---|---|---|---|
| 1 | 452 | 0.909 | 411 |
| 2 | 500 | 0.826 | 413 |
| 3 | 278 | 0.751 | 209 |
| | | PV of Cash Inflow | 1033 |
| | | Less: Initial Investment | - 1000 |
| | | NPV | + 33 |

When discount rate is 14%

| Year | Net Cash Flow | Discount Factor | PV of Cash Flow |
|---|---|---|---|
| 1 | 452 | 0.877 | 396 |
| 2 | 500 | 0.769 | 385 |
| 3 | 278 | 0.675 | 188 |
| | | PV of Cash Inflow | 969 |
| | | Less: Initial Investment | - 1000 |
| | | NPV | - 31 |

When discount rate is 12%

| Year | Net Cash Flow | Discount Factor | PV of Cash Flow |
|---|---|---|---|
| 1 | 452 | 0.893 | 403 |
| 2 | 500 | 0.797 | 399 |
| 3 | 278 | 0.712 | 198 |
| | | PV of Cash Inflow | 1000 |
| | | Less: Initial Investment | - 1000 |
| | | NPV | 0 |

The above trial and error method can easily solve by using the following method

- Choose a discount rate at random which makes the NPV of the project positive. This discount rate is known as lower discount rate (LDR).
- Choose a higher discount rate (HDR), which makes the NPV negative.
- Solve the following equation

$$\text{IRR} = \text{LDR} + \frac{\text{NPV @ LDR}}{(\text{NPV @ LDR} - \text{NPV @ HDR})} \times (\text{HDR} - \text{LDR})$$

For the above example,

LDR = 10%, HDR = 14%, NPV @ 10% = + 33, NPV @ 14% = - 31

$$\text{IRR} = 10\% + \frac{33}{(33+31)} \times (14\% - 10\%) = 12\%$$

**Decision Criteria for IRR**

- If IRR > Cost of Capital (k), accept the project.
- If IRR < Cost of Capital (k), reject the project.
- If IRR = Cost of Capital (k), the firm would be indifferent to the project.

For a project to be acceptable, the IRR must exceed or at least equal to the firm's cost of capital or opportunity cost.

**Modified Internal Rate of Return (MIRR)**

The IRR assumes that a project's annual cash flows can be reinvested at the project's internal rate of return, which should be the project's cost of capital. MIRR is the discount rate at which the present value of a project's cost is equal to the sum of the present value of its future cash inflow, where the cash inflows are reinvested at the firm's cost of capital. So MIRR is more accurate measure for calculating the firms return.

**Problems of Internal Rate of Return (IRR)**

- Difficult to calculate - Trial and Error method
- Non-conventional cash flow – A double change in the sign of the cash flow gives two solution for IRR, which is known as multiple IRR problem.
- Differences in the scale of investment - IRR ignores the size of the investment because the result of the IRR method is expressed as a percentage.
- The IRR assumes that a project's annual cash flows can be reinvested at the project's internal rate of return, which should be the project's cost of capital. MIRR is an alternative to address above-mentioned problem.

## 3.6Sensitivity Analysis

The most common method of evaluating projects source of risk is the sensitivity analysis. The net cash flow from a project depends on many variables, each of which must be estimated. Suppose we wish to calculate the net cash flow from a project to generate electricity from industrial waste to replace power currently being purchased from the electric utility. We must estimate the investment outlay, the amount of waste available for burning, the costs of operating and maintaining the generating equipment, the amount of electricity generated, and the probable price of the electricity if we continue to purchase it from the electric utility rather than generate it.Sensitivity analysis is a systematic way to determine which of the factors affecting project cash flow are most important. The basic procedure is to recalculate the NPV using assumptions that differ from those used to produce the original net cash flow estimates.

### 3.6.1 Purpose of Sensitivity Analysis

- The purpose of analysis is to assess how "sensitive" the NPV is to changes in assumptions about the underlying economic factors.
- If a small error proves critical, in the sense that the NPV becomes negative, the project is considered very risky since small estimation errors are likely to occur.

**Example: Sensitivity Analysis of a Hypothetical Project**

| **Description** | **Estimate (Original)** | **Description** | **Estimate (Original)** |
|---|---:|---|---:|
| Initial Cost | Tk.1,000,000 | Power Generated / year (KWH) | 1,000,000 |
| Estimated Life (Years) | 10 | Price of Electricity / KWH | Tk.0.25 |
| Depreciation / year | Tk.100,000 | Tax Rate | 40% |
| Operating Costs / year | Tk.50,000 | Discount Rate | 9% |

Calculation of Net Cash Flow

| **Income Statement** | **Amount (Tk.)** |
|---|---:|
| Revenue (Electricity Savings) | 250,000 |
| Operating Expense | 50,000 |
| Depreciation Expense | 100,000 |
| **Earning Before Tax** | **100,000** |
| Taxes | 40,000 |
| **Earning After Tax** | **60,000** |
| **Cash Flow Adjustments** | |
| Earning After Tax | 60,000 |
| + Depreciation | 100,000 |
| **Net Cash Flow** | **160,000** |

Results : PV of net cash Inflow = $\sum_{t=1}^{10} \frac{160{,}000}{(1.09)^t}$ =1,026,825, Cash Outflow = 1,000,000

NPV = 26825; BCR = 1.03; IRR = 9.61%

The financial manager has to perform a sensitivity analysis by examining how sensitive the estimated NPV is to an estimation error of 10% in the estimates of the economic factors affecting the cash flow.

| **Description** | **Present Assumption** | **Case-1 (Operating cost increased)** | **Case-2 (Power generation decreased)** | **Case-3 (Price of the electricity decreased)** | **Case-4 (Tax rate increased)** | **Case-5 (Project life decreased)** |
|---|---|---|---|---|---|---|
| Operating Cost | 50,000 | **55,000** | 50,000 | 50,000 | 50,000 | 50,000 |
| Power Generation | 1,000,000 | 1,000,000 | **900,000** | 1,000,000 | 1,000,000 | 1,000,000 |
| Price of Electricity | 0.25 | 0.25 | 0.25 | **0.225** | 0.25 | 0.25 |
| Tax Rate | 40% | 40% | 40% | 40% | **44%** | 40% |
| Project Life | 10 | 10 | 10 | 10 | 10 | **9** |
| NPV | 26,825 | 7,572 | -69,440 | -69,440 | 1,155 | -14,115 |
| BCR | 1.03 | 1.01 | 0.93 | 0.93 | 1.00 | 0.99 |
| IRR | 9.61% | 9.17% | 7.40% | 7.40% | 9.03% | 8.65% |
| Decision | **Accept** | **Accept** | **Reject** | **Reject** | **Accept** | **Reject** |

Sensitivity Analysis of the Project Assuming Different Estimation Error

| **Estimation Error** | **Power Generation** | **Operating Cost** | **Tax Rate** |
|---|---|---|---|
| -20% | -165,704 | 65,331 | 78,166 |
| -15% | -117,572 | 55,075 | 65,331 |
| -10% | -69,440 | 46,078 | 52,496 |
| -5% | -21,307 | 36,452 | 39,661 |
| 0% | 26,825 | 26,825 | 26,825 |
| 5% | 74,958 | 17,199 | 13,990 |
| 10% | 123,090 | 7,572 | 1,155 |
| 15% | 171,223 | -2,054 | -11,681 |
| 20% | 219,355 | -11,681 | -24,516 |

From the above data it is found that the major sources of risk in this project are uncertainties in the future price of electricity, volume of power generated and life of the project. NPV is most sensitive to errors in the forecasts of the volume of power generated, and the price of electricity. At this point sensitivity analysis has made its contribution. Fluctuation in volume of power generated is not very risky factor as the plant manager would be more efficient in his assignment. Sensitivity analysis is a flexible method that provides useful information, but it does not tell what decision should be made.

## 3.7Cost-Volume-Profit Analysis

CVP analysis is one of the most important tools that managers usually use for making important business decisions like selection of borrower for granting credit or in choosing best form of investment. CVP analysis examines the behavior of total revenues, total costs, and operating income as changes occurs in the output level, selling price, variable costs per unit & fixed costs. It helps us to understand the inter-relationship between cost, volume and profit in an organization by focusing on interactions between the five elements.

- Price of product
- Volume or level of activity
- Per unit variable cost
- Total fixed cost
- Mix of product sold

***Objective of CVP Analysis***

CVP analysis seeks to find out the most profitable combination of the variable cost, fixed cost, selling price and sales volume of an organization by analyzing the interrelationship among the variables.

***Assumptions of CVP Analysis***

- Selling price is constant throughout the entire relevant range i.e. price of a product or service will not change as volume changes.
- Costs are linear throughout the entire relevant range and they can accurately be divided into variable and fixed elements.
- Sales mix is constant.
- Production is equal to sales i.e. inventory level does not change.

***Basic concepts & tools used in CVP analysis***

Various new concepts are used in this analysis to make it meaningful. These concepts are set out below in brief.

***Contribution Margin (CM)***

Contribution Margin is the amount of revenue available to cover the fixed expenses and to provide for the profit.  In other words, CM is the difference between the sales price and variable expense. It can be expressed both in per unit and as total. In formula

CM = Sales Revenue –Variable Expenses

### *Importance of CM Analysis*

From CM analysis manager will be able to know how to increase CM of the organization, which will ultimately increase the profit. From the above formula it is clear that CM can be increase in two ways either by increase in sales (price or units sold or both) or by reducing variable expenses. But increasing the sales in any form to a great extent is beyond the control of the manager. Hence the only viable option to the manager to increase the CM is to reduce variable expenses.

### *Contribution Margin Ratio*

Contribution margin expressed as a percentage of sales is known as contribution margin ratio. It is abbreviated CM ratio. Once this percentage is calculated, amount of contribution margin can be easily found by multiplying the amount of sales by the CM ratio. The formula is given below

$$\text{CM Ratio} = \frac{\text{CM}}{\text{Sales in Taka}} \times 100$$

### *Break-Even Point*

Break-even point of a firm is a point where total revenue equals total cost. It indicates the level of output at which the firm neither earns profit nor incurs loss. In other words, it is a point of earning zero profit. This can be presented with an example like the following:

| **Output** | **Total cost** | **Total revenue** | **Profit** |
|---|---|---|---|
| 200 | 700 | 600 | -100 |
| **300** | **900** | **900** | **0** |
| 400 | 1100 | 1200 | +100 |

No firm can remain satisfied with this level of output. Each firm would like to increase its profit. Similarly, a firm, which is in a position lower than the break-even point, would like to reach the break-even point and thereafter cross this point at the earliest possible time. If a firm operates below the break-even point it cannot survive for a longer time. As the aim of any firm is to earn more and more profit each firm would like to operate at a level above its break-even point.

**Calculation of Break-Even Point**

FC = Fixed Cost; VC = Variable Cost; TC = Total Cost;

TR = Total Revenue; C = Contribution; P = Profit

FC + VC = TC; TR – TC = P; TR – VC = C; C – FC = P

**Formula 1:** BEP = Fixed cost / Per unit contribution

Or,BEP = Fixed cost / (Selling price per unit – Variable cost per unit)

**Formula 2:** BEP = Fixed cost / {(Total sales – Variable cost) / Total sales}

Output (number of units produced) at the break-even point can be calculated using formula 1 and break-even sales can be calculated using formula 2.

**Example of Calculating Break-Even Point:**

(figures in thousand)

| Output (units) | FC | VC (Tk. 2.00 per unit) | TC | TR (Selling price = Tk. 3.00) | C | P |
|---|---|---|---|---|---|---|
| 0 | 300 | 0 | 300 | 0 | 0 | -300 |
| 100 | 300 | 200 | 500 | 300 | 100 | -200 |
| 200 | 300 | 400 | 700 | 600 | 200 | -100 |
| 300 | 300 | 600 | 900 | 900 | 300 | 0 |
| 400 | 300 | 800 | 1100 | 1200 | 400 | +100 |
| 500 | 300 | 1000 | 1300 | 1500 | 500 | +200 |
| 600 | 300 | 1200 | 1500 | 1800 | 600 | +300 |

The following data are available from a firm producing a commodity.

Fixed cost = Tk. 300000; Variable cost per unit = Tk. 2.00; Selling price per unit = Tk. 3.00

**<u>Applying formula 1</u>**

BEP = Fixed cost / (Selling price per unit – Variable cost per unit)

BEP = 300000/ (3– 2) = 300000 (units)

Given the following information:

Fixed cost = Tk. 300000; Variable cost = Tk. 800000; Total sales = Tk. 1200000

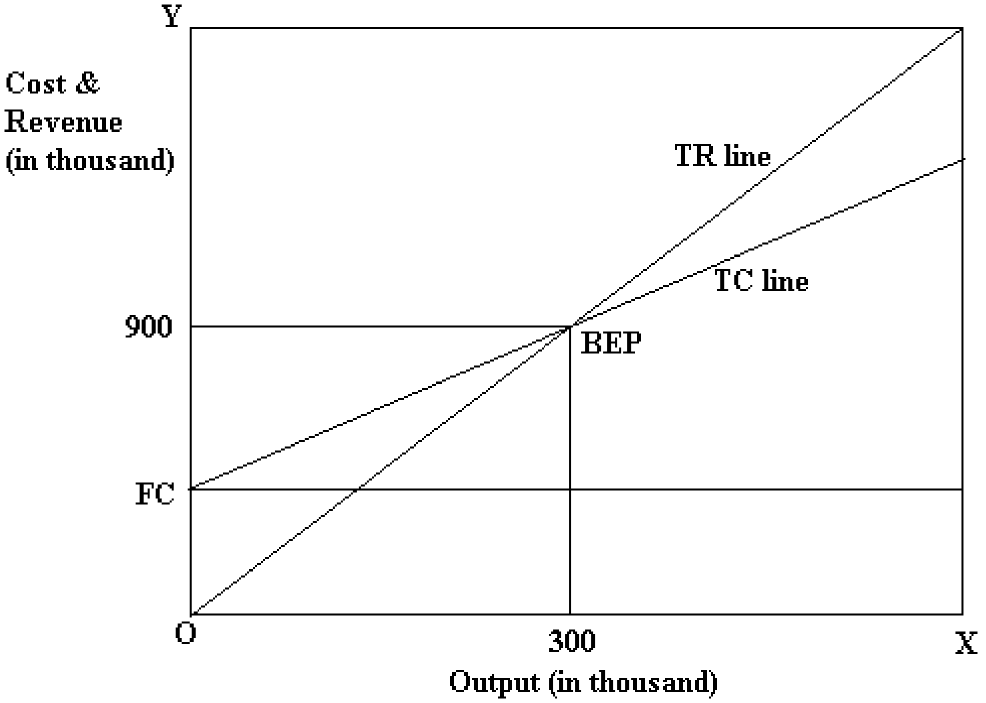
**<u>Applying formula 2</u>**

BEP = Fixed cost / {(Total sales – Variable cost) / Total sales}

BEP = 300000 / {(1200000– 800000) / 1200000}= 900000 (taka)

**Break-Even Chart**

Break-even point can be determined graphically also. This presentation is known as Break-Even Chart (BEC). The break-even point indicated in the chart will be the point of intersection between total cost line and total revenue line.




**BEP as a percentage of capacity** = (BEP / Total capacity) 100

= (300000 / 600000) × 100 = 50%

or,

= (900000 / 1800000) × 100 = 50%

***Main Assumptions:***

- Fixed cost and variable cost can be ascertained.
- The behavior of fixed and variable costs will remain unchanged.
- Management policies do not change as production changes.
- There will be no change in pricing due to change in volume.
- Operating efficiency will not increase or decrease.

Break-even analysis is a simple and useful concept. It is based on certain assumptions, which may limit the utility and general applicability of this analysis. Although break-even analysis suffers from a number of limitations it still remains as an important tool of profit planning.

**Importance of Breakeven Point Analysis**

Breakeven point analysis is important in a sense that it indicates the risk involve in the project undertaken. A higher breakeven point indicates that it will take more time to reach the zero-profit position and obviously more time for earning profit and vice versa. A banker considering a short-term credit application will prefer a low breakeven point because it involves low risk. It is also important because it indicates at what level of sales the company will be profitable.

***Target Profit Analysis***

Through the target profit analysis an organization will be able to know how much units it should sell to reach a target profit amount. This can be found by applying the following formulae.

$$\boldsymbol{U}\textbf{nits to be Sold} = \frac{\textbf{Fixed Expense} + \textbf{Target Profit}}{\textbf{Unit Contribution Margin}}$$

***Margin of Safety (MS)***

The margin of safety is the excess of sales of an organization over its BEP sales. It indicates how safe the organization is towards achieving its goal. The formula is-

MS in units = Actual Sales in units – BEP Sales in units

MS in Taka = Actual Sales in taka – BEP Sales in taka

$$\text{Margin of Safety Percentage} = \frac{\text{Margin of Safety}}{\text{Sales}} \times 100$$

**Limitations of CVP Analysis**

CVP analysis is criticized on the following grounds:

- Separation of variable and fixed element from mixed cost is the precondition of CVP analysis. But it is really very difficult and costly in consideration of both time and money.
- This analysis assumes that selling price is constant throughout the entire relevant range but it in reality lit is never constant even within the relevant range.
- The assumption that there is no inventory or inventory levels do not change is irrelevant.
- Managers cannot rely absolutely on CVP analysis for any decision rather it can only be used with other techniques to arrive at a decision.

The above CVP can also be used to choose sales mix of a multi-product company. Although CVP analysis is criticized on various grounds, it is widely used in many business decisions accompanied with other tools of decisions. For example, relevant cost analysis, incremental analysis etc.

## 3.8Assessment of Working Capital Requirement

Any business entity requires basically two types of capital viz. ‘fixed/permanent capital’ for the purpose of acquisition of fixed assets and other long-term investments to run the business and ‘working capital’ for the purpose of carrying out its day- to-day operations.

### 3.8.1 Concept of Working Capital

Working capital is that part of the capital which is required to complete the whole operating cycle of an entity by maintaining certain level of inventories (such as raw materials, work-in-process, finished goods, stores and spares etc.), trade receivables and cash balance for its day-to-day operations.

The term working capital is used as a gross as well as a net concept. Gross Working Capital represents the totality of fluctuating funds invested in all current assets in a business. Whereas net working capital refers to the excess of current assets over current liabilities and indicates the margin or buffer for meeting obligations within the ordinary operating cycle of the business.

The total value of the current assets which is held by an entity in the balance sheet at any point of time, in crude terms, is called the Gross Working Capital (GWC). In other words, the total current assets which are locked up in the operating cycle of the entity can be defined as Gross Working Capital.

Usually, the part of the current assets of an entity is supported by the current liabilities and other short-term sources of funds say bank borrowings, etc. and the gap (or difference) between current assets and current liabilities is called the net margin of working capital. The sources of net margin of working capital financing are equity/long term funds.

### 3.8.2 Need for Working Capital

It is needed for the smooth operation of the firm. Needed volume of working capital depends on the length of operating cycle. To get cash earlier small length of operating cycle is desired. Length of operating cycle depends on three factors:

- Conversion of cash into inventory
- Conversion of inventory into receivables

- Conversion of receivables into cash

### 3.8.3 Factors that influence Working Capital Requirement

The following factors affect the working capital requirement:

- Nature of industry
- The operating cycle
- The manufacturing cycle
- Production policies
- Shift in demand for products
- Competitive conditions
- Growth and expansion programs
- Operating efficiency
- Taxation
- Dividend policy
- Depreciation policy
- Price level changes
- Variation in supply of raw materials

### 3.8.4 Purposes of Maintaining Working Capital

A manufacturing organization needs working capital for the following purposes:

- For purchase of raw materials,
- For purchase of stores and spares,
- For keeping funds blocked under stock in process,
- For keeping funds blocked in finished stocks,
- For keeping funds blocked in sundry debtors and receivables pending final realization of the bills,
- For making advance payments to their suppliers for ensuring continuous supply of raw materials, stores etc.
- For meeting day to day expenses like payment of wages, power bills etc.

### 3.8.5 Operating Cycle

Operating cycle is the length of time between the entering into stock by procuring materials, labor, overheads, etc. and receiving cash from realization of receivables and cash sales.

Operating cycle starts with the cash and bank balances. It uses a part of the cash to acquire raw materials, to meet the various manufacturing costs, etc. Raw materials are converted into finished goods through work-in-process. Finished goods get sold and become receivables. On realization, receivables turn into cash. The cycle will repeat itself as the business goes on.

The span of the operating cycle covers:

- Raw Materials (RM) holding period
- Processing period
- Finished Goods (FG) holding period
- Credit allowed to customers in days
- Credit obtained from creditors in days

Estimating Operating Cycle Financing Needs

| | |
|---|---|
| Stock of RM → | Holding Period of RM in Days (HPRM) |
| Work-in-Process → | Time Required of WIP (TRWIP) |
| Stock of Finished Goods → | Holding Period of FG in Days (HPFG) |
| Receivable → | Collecting Period of Receivable in Days (CPR) |
| Operating Cycle (OC) → | Length of average OC in days = HPRM + TRWIP + HPFG + CPR |
| Creditors → | Payment Period of Creditors in Days (PPC) |
| Financing Need → | Days of Financing Need = HPRM + TRWIP + HPFG + CPR - PPC |

Alternatively

$$D_{oc} = D_{rm} + D_{wip} + D_{fg} + D_{ar}$$

$$\text{Financing need} = D_{oc} - D_{ap}$$

$D_{oc}$ = Duration of operating cycle; $D_{rm}$ = Duration of raw materials stock;

$D_{wip}$= Duration of WIP stock; $D_{fg}$ = Duration of finished goods stock;

$D_{ar}$ = Duration of accounts receivable; $D_{ap}$ = Duration of accounts payable

### 3.8.6 Bangladesh Bank Guideline for Assessing Working Capital Requirement

***<u>Name of Sub-sector: Pharmaceuticals Industry</u>***

1. **Capacity Utilization**

| | |
|---|---|
| a) Existing Unit | : 5% above last year's actual capacity utilization subject to maximum of 70%. |
| b) New Unit | : 55% of sanctioned/rated capacity whichever is lower. |

2. **Inventory**

| | |
|---|---|
| a) Imported Raw Materials | : 90-120 days keeping in view the life expectancy (cost of factory site) |
| b) Local Raw and Packing Materials | : 30 days (cost of factory site) |
| c) Work-in-process | : 07 days (at production cost) for small industries<br>15 days (at production cost) for large & medium |
| d) Finished Goods | : 15 days (at production cost) |
| e) Stores and Spares | : 90 days (cost at factory site) |

3. **Receivables** : 21 days (at production cost) for small industries
30 days (at production cost) for large & medium

4. **Cash in hand** : Cash requirements for other dayto day expenditure (e.g. salary, transportation, postage, utilities,etc.) should be arranged by the sponsors.

5. **Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements |
|---|---|---|
| Raw and Packing Materials | | |
| a) Imported | 90-120 days | |
| b) Local | 30 days | |
| Work – in – process | 07/15 days | |
| Finished Goods | 15 days | |
| Stores and Spares | 90 days | |
| Receivables | 21/30 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. In case of existing established units, the period of receivables should not exceed 15 days

3. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Leather Finishing Industry***

**1. Capacity Utilization**

a) Existing Unit : 5% above last year's actual capacity utilization subject to maximum of 90%.

b) New Unit : 70% of sanctioned/rated capacity whichever is lower.

**2. Inventory**

a) Raw Hides : Up to maximum of 50% of the estimated requirement to be purchased during Eid-ul-Azha for uniform utilization throughout the year
Rest of the estimated requirement to be purchased throughout the year for uniform maintenance of at least 30 days stock

b) Imported Chemical Stock : 90 days (cost of factory site)

c) Local Chemical Stock : 30 days (cost of factory site)

d) Work-in-process : 10 days (at production cost)

e) Finished Goods : 30 days (at production cost)

f) Stores and Spares : 90 days (cost at factory site)

**3. Cash in hand** : Cash requirements for other dayto day expenditure (e.g. salary, transportation, postage, utilities,etc.) should be arranged by the sponsors.

**4. Format for working capital assessment:**

| **Items** | **Tied – up period** | **Working capital Requirements** |
|---|---|---|
| Raw Hides | 30 days of "Rest" (after Eid purchase) | |
| Imported Chemicals | 90 days | |
| Local Chemicals | 30 days | |
| Work – in – process | 10 days | |
| Finished Goods | 30 days | |
| Stores and Spares | 90 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.

2. Stock of finished goods may be allowed for more than 30 days against confirmed export order and/or specific letter of credit.
3. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Textile Spinning Industry***

**1. Capacity Utilization**

a) Existing Unit : 5% above last year's actual capacity utilization subject to maximum of 75%.

b) New Unit : 70% of sanctioned/rated capacity whichever is lower.

**2. Inventory**

| | |
|---|---|
| a) Imported Raw materials | : 90 days (cost of factory site) |
| b) Local Raw Materials | : 30 days (cost of factory site) |
| c) Work-in-process | : 03 days (at production cost) |
| d) Finished Goods | : 10 days (at production cost) |
| e) Stores and Spares | : 90 days (cost at factory site) |

**3. Receivables** : 15 days (at production cost)

**4. Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

**5. Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements |
|---|---|---|
| Raw Materials | | |
| a) Imported | 90 days | |
| b) Local | 30 days | |
| Work – in – process | 03 days | |
| Finished Goods | 10 days | |
| Stores and Spares | 90 days | |
| Receivables | 15 days | |
| Cash | Lump-sum | |

**Note:**
1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Textile Weaving Industry***

**1. Capacity Utilization**

a) Existing Unit : 5% above last year's actual capacity utilization subject to maximum of 75%.

b) New Unit : 60% of sanctioned/rated capacity whichever is lower.

**2. Inventory**

a) Raw materials : 30 days (wholesale price)
b) Work-in-process : 15 days (at production cost)
c) Finished Goods : 15 days (at production cost)
d) Stores and Spares : 30 days (cost at factory site)

**3. Receivables** : 21 days (at production cost)

**4. Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

**5. Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements |
|---|---|---|
| Raw Materials | 30 days | |
| Work – in – process | 15 days | |
| Finished Goods | 15 days | |
| Stores and Spares | 30 days | |
| Receivables | 21 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Textile Finishing Industry***

**1. Capacity Utilization**

| | |
|---|---|
| a) Existing Unit | : 5% above last year's actual capacity utilization subject to maximum of 75%. |
| b) New Unit | : 60% of sanctioned/rated capacity whichever is lower. |

**2. Inventory**

| | |
|---|---|
| a) Fabrics | : 50% of gray fabrics to be purchased (ex-factory) and remaining 50% to be processed on service basis |
| b) Grey Fabrics | : 30 days (cost at factory site) |
| c) Imported Dyes and Chemicals | : 90 days (cost at factory site) |
| c) Local raw materials | : 30 days (cost at factory site) |
| d) Work-in-process | : 03 days (at production cost) |
| e) Finished Goods | : 15 days of 50% production (at production cost) |
| f) Stores and Spares | : 120 days (cost at factory site) |

**3. Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

**4. Format for working capital assessment:**

| **Items** | **Tied – up period** | **Working capital Requirements** |
|---|---|---|
| Grey fabrics (50%) | 30 days | |
| Imported dyes and chemicals | 90 days | |
| Local dyes and chemicals | 30 days | |
| Work – in – process | 3 days | |
| Finished Goods (50%) | 15 days | |
| Stores and Spares | 120 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Export Oriented Fish, Frog-leg Processing Industry***

**1. Capacity Utilization**

a) Existing Unit : 5% above last year's actual capacity utilization subject to maximum of 60%.

b) New Unit : 50% of sanctioned/rated capacity whichever is lower.

**2. Inventory**

a) Fish, Frog-leg : 03 days including transit (cost at factory site)

(Procurement price of raw fish should generally be in the range of 65% to 70% of FOB price of finished product)

b) Other Local Raw and Packing Material : 30 days (cost at factory site)

c) Work-in-process : 01 day (at production cost)

d) Finished Goods : 45 days (at production cost) but 60 days (in peak season)

e) Stores and Spares : 90 days (cost at factory site)

**3. Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

**4. Format for working capital assessment:**

| **Items** | **Tied – up period** | **Working capital Requirements** |
|---|---|---|
| Fish, Frog-leg | 03 days | |
| Other Local Raw and Packing Material | 30 days | |
| Work – in – process | 01 days | |
| Finished Goods | 45 days | |
| Stores and Spares | 90 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. Additional accommodation of stock of finished goods may be allowed against confirmed export order and/or specific letter of credit.
3. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Edible Oil Refining Industry***

1. **Capacity Utilization**

| | |
|---|---|
| a) Existing Unit | : 5% above last year's actual capacity utilization subject to maximum of 75%. |
| b) New Unit | : 60% of sanctioned/rated capacity whichever is lower. |

2. **Inventory**

| | |
|---|---|
| a) Raw materials (Imported) | : 90 days (cost at factory site) |
| b) Work-in-process | : 03 days (at production cost) |
| c) Finished Goods | : 10 days (at production cost) |
| d) Stores and Spares | : 30 days (cost at factory site) |

3. **Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

4. **Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements |
|---|---|---|
| Raw Materials (Imported) | 90 days | |
| Work – in – process | 03 days | |
| Finished Goods | 10 days | |
| Stores and Spares | 30 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Light Engineering Industry***

1. **Capacity Utilization**

| | |
|---|---|
| a) Existing Unit | : 5% above last year's actual capacity utilization subject to maximum of 60%. |
| b) New Unit | : 50% of sanctioned/rated capacity whichever is lower. |

2. **Inventory**

| | |
|---|---|
| a) Raw Material (Imported) | : 90 days (cost at factory site) |
| b) Raw Material (Local) | : 30 days (cost at factory site) |
| c) Work-in-process | : 05 days (at production cost) |
| d) Finished Goods | : 15 days (at production cost) |
| e) Stores and Spares | : 90 days (cost at factory site) |

3. **Receivables** : 15 days (at production cost)

4. **Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

5. **Format for working capital assessment:**

| **Items** | **Tied – up period** | **Working capital Requirements** |
|---|---|---|
| Raw Materials (Imported) | 90 days | |
| Raw Materials (Local) | 30 days | |
| Work – in – process | 05 days | |
| Finished Goods | 15 days | |
| Stores and Spares | 90 days | |
| Receivable | 15 days | |
| Cash | Lump-sum | |

**Note:**
1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Cold Storage Industry***

1. **Capacity Utilization**

a) Existing Unit : 10% above last year's actual capacity utilization subject to maximum of 80%. (The space that would be utilized for keeping potato on rental basis should be excluded from the capacity utilization. The total number of working days considered to be 270 days)

2. **Inventory**

a) Raw Materials : For the above-mentioned capacity (Price of potato as per Agricultural Marketing Directorate, price prevailing at the time of purchase plus 5%)

b) Packing Materials : 7.5% of raw material procurement price

c) Stores and Spares : 90 days (cost at factory site)

3. **Receivables** : 07 days (at production cost)

4. **Electricity & Insurance Premium:** Actual bill to be paid by the bank directly to the relevant authority

5. **Cash in hand** : Cash requirements for other dayto day expenditure (e.g. wages, transportation, postage, utilities,etc.) should be arranged by the sponsors.

6. **Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements |
|---|---|---|
| Raw Materials | For total capacity | |
| Packing Materials | For total capacity | |
| Stores and Spares | 90 days | |
| Receivable | 07 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from bank to bank on the basis of actual situation for unit requiring special dispensation.

***Name of Sub-sector: Electrical Goods Manufacturing Industry***

**1. Capacity Utilization**

a) Existing Unit : 5% above last year's actual capacity utilization subject to maximum of 75%.

b) New Unit : 55% of sanctioned/rated capacity whichever is lower.

**2. Inventory**

| | |
|---|---|
| a) Imported Raw materials | : 90 days (cost of factory site) |
| b) Local Raw Materials | : 30 days (cost of factory site) |
| c) Work-in-process | : 07 days (at production cost) |
| d) Finished Goods | : 15 days (at production cost) |
| e) Stores and Spares | : 90 days (cost at factory site) |

**3. Receivables** : 15 days (at production cost)

**4. Cash in hand** :Cashrequirements for other day to day expenditure (e.g. wages, transportation, postage, utilities, etc.) should be arranged by the sponsors.

**5. Format for working capital assessment:**

| Items | Tied – up period | Working capital Requirements (Tk.) |
|---|---|---|
| Raw Materials | | |
| a) Imported | 90 days | |
| b) Local | 30 days | |
| Work – in – process | 07 days | |
| Finished Goods | 15 days | |
| Stores and Spares | 90 days | |
| Receivables | 15 days | |
| Cash | Lump-sum | |

**Note:**

1. Margin/security will be as per bank-client relationship.
2. The norms as indicated above including actual capacity utilization for determining working capital requirements may, however, be varied from Bank to Bank on the basis of actual situation for unit requiring special dispensation.

**Source**: Bangladesh Bank BCD Circular No.30 dated 29 December, 1988.

## 3.9Indicative Questions

1. What are the different aspects of credit appraisal?
2. Discuss different techniques of analyzing financial viability?
3. Why is environmental aspect very important for assessing feasibility of the project?
4. Why is credit appraisal so important?
5. Which of the aspects of credit appraisal is most important?Why?
6. Discuss the different techniques of capital budgeting.
7. Why NPV is considered better than pay back period?
8. What do you understand by sensitivity analysis?
9. What do you mean by working capital financing? (Section-8.1)
10. How will you assess the working capital requirement of a prospective borrower?

# Module – D
# Credit Risk Management

## 4.1 Concepts and Types

Credit risk is the probability that a borrower will not be able to pay accrued interest or repay principal amount of a loan according to terms specified in the credit agreement. In other words, it is the probability of default on the part of the borrower to act as per the agreement. Credit risk comes from a bank's dealing with individual, corporate, bank, NBFI or a sovereign. It may arise due to inability or unwillingness to perform. It may stem from on-balance sheet and off-balance sheet activities. Credit risk not only includes default risk but also downgrade risk. As a result of excessive credit risk, bank's profitability, capital adequacy and cash flows are adversely affected.

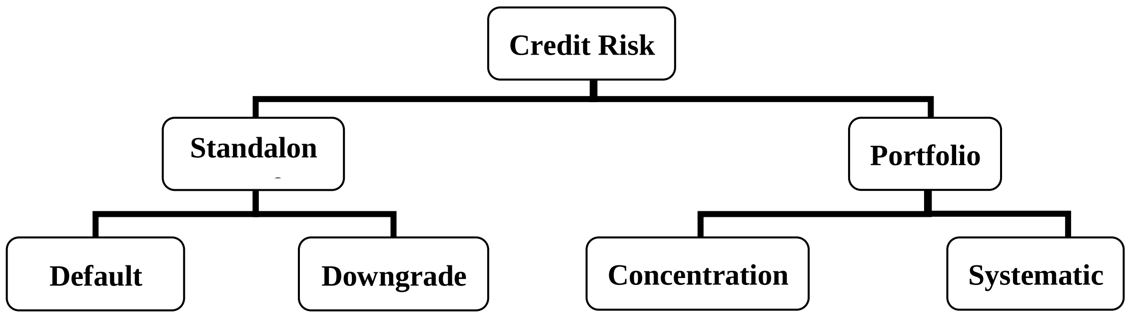
### 4.1.1 Types of Credit Risk

- **Standalone/Transaction Credit Risk**

  It refers to the losses in the event of default or in the event of decline in the borrower's credit rating or grade. Therefore, standalone credit risk includes both default risk and downgrade risk. It occurs mainly from banks' failure to select good borrower with a viable project.

- **Portfolio Credit Risk**

  It arises when the economy as a whole does not perform well or when credit portfolio is not well diversified. It has two dimensions: systematic risk and concentration risk.




### 4.1.2 Different Types of Default

- **Technical default** occurs when a borrower breaches the terms and conditions of the loan agreement.
- **Strategic default** occurs when a borrower undertakes a strategy not to repay the loans.

- **Payment default** occurs when a borrower fails to pay the installment of a loan on time.
- **Economic default** occurs when a borrower has less amount of assets at market value than the liabilities i.e. when the liabilities are greater than assets.

### 4.1.3 Why is Credit Risk Management Important for Banks?

Credit is the main source of earning and cash flow of a bank. If the quality of bank credit declines, it adversely affects income, cash flow and capital adequacy of banks. Cash flow problem may lead to credit crunch and failure to pay the depositors on time. Erosion of depositors' confidence may result from the failure to pay and such erosion of confidence may invite bank failure.

### 4.1.4 What are the Causes of Standalone Credit Risk?

The following reasons, other than selection of wrong borrower with financially unviable project, are believed to be the reasons of standalone credit risk at banks in Bangladesh.

- Improper or weak need assessment
- Wrong structuring
- Insufficient cash flow generation
- Failure to understand forex risk
- Name lending ignoring fundamentals
- Lack of monitoring of approval condition
- Lack of ready succession
- Insufficient security and guarantee
- Incomplete documentation
- Scarcity of utilities and input
- Undermining the importance of interbank deposits and OBSA
- Poor Governance (corruption, failure to stand in pressure, related party transaction)

### 4.1.5 What are the Causes of Portfolio Credit Risk?

Banks suffer credit portfolio risk mainly because of the following reasons.

- Credit concentration
- Economic downturn
- Absence of in-depth portfolio review

## 4.2 Principles of Bank's Credit Risk Management

**Principle-1:** The board should have responsibility for approving and periodicallyreviewing the credit risk strategy and significant credit risk policies of the bank. Thestrategy should reflect the bank's risk appetite and the level of profitability the bankexpects to achieve for incurring various credit risks.

**Principle-2:** Senior management should have responsibility for implementing the creditrisk strategy approved by the board and for developing policies and procedures foridentifying, measuring, monitoring and controlling credit risk. Such policies andprocedures should address credit risk in all of the bank's activities and at both theindividual credit and portfolio levels.

**Principle-3:** Banks should identify and manage credit risk inherent in all products andactivities. Banks should ensure that the risks of products and activities new to them aresubject to adequate procedures and controls before being introduced or undertaken,and approved in advance by the BOD or its appropriate committee.

**Principle-4:** Banks must operate under sound, well-defined credit-granting criteria.These criteria should include a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment.

**Principle-5:** Banks should establish overall credit limits at the level of individualborrowers, and group of connected counter parties that aggregate different types ofexposures, both inthe banking and trading book and on and off-balance sheet.

**Principle-6:** Banks should have a clearly established process in place for approving newcredits as well as the extension of existing credits.

**Principle-7:** All extensions of credit must be made on an arm's-length basis. Inparticular,credits to related companies and individuals must be monitored withparticular care and other appropriate steps taken to control or mitigate the risks ofconnected lending.

**Principle-8:** Banks should have in place a system for the ongoing administration oftheir various credit risk-bearing portfolios.

**Principle-9:** Banks must have in place a system for monitoring the condition ofindividual credits, including determining the adequacy of provisions and reserves.

**Principle-10:** Banks should develop and utilize internal risk rating systems in managingcredit risk. The rating system should be in line with the regulatory instructions andconsistent with the nature, size and complexity of a bank's activities.

**Principle-11:** Banks must have information systems and analytical techniques thatenable management to measure the credit risk inherent in all on balance sheet and off-balance sheet activities. The management information system should provide adequateinformation on the composition of the credit portfolio, including identification of anyconcentrations of risk.

**Principle-12:** Banks must have in place a system for monitoring the overallcomposition and quality of the credit portfolio.

**Principle-13:** Banks should take into consideration potential future changes ineconomic conditions when assessing individual credits and their credit portfolios, andshould assess their credit risk exposures under stressful conditions.

**Principle-14:** Banks should establish a system of independent, ongoing credit reviewand the results of such reviews should be communicated directly to the board andsenior management.

**Principle-15:** Banks must ensure that the credit-granting function is being properlymanaged and that credit exposures are within levels consistent with prudentialstandards and internal limits. Banks should establish and enforce internal controls andother practices to ensure that exceptions to policies, procedures and limits are reportedin aimely manner to the appropriate level of management.

**Principle-16:** Banks must have a system in place for managing problem credits andvarious other workout situations.

## 4.3 Indicators of High Credit Risk in a Bank

- The level of loans is high relative to total assets and equity capital.
- Loan growth rates significantly exceed national trends and the trends of similar banks.
- Growth was not planned or exceeds planned levels, and stretches management and staff expertise.
- The bank is highly dependent on interest and fees from loans and advances.
- Loan yields are high and reflect an imbalance between risk and return.
- The bank has one or more large concentrations. Concentrations have exceeded internal limits.
- Existing and/or new extensions of credit reflect liberal judgment and risk-selection standards.
- Practices have resulted in a large number of exceptions to the credit policy.
- The bank has a large volume and/or number of classified loans.
- Even among standard and special mention account loans, the portfolios are skewed toward lower internal ratings.
- Classified loans are skewed toward the less favorable categories (doubtful and bad/loss).
- Collateral requirements are liberal, or if conservative, there are substantial deviations from requirements.
- Collateral valuations are not always obtained, frequently unsupported, and/or reflect inadequate protection.
- Loan documentation exceptions are frequent, and exceptions are outstanding for long periods of time.
- The bank liberally reschedules and/or restructures loans in a manner that raises substantial concern about the accuracy or transparency of reported problem loan numbers.
- Quarterly loan losses, as a percentage of the total loan portfolio, are high and/or routinely exceed established provisions.

## 4.4 Indicators of Poor Credit Risk Management

- Credit culture is absent or materially flawed.
- Strategic and/or business plans encourage taking on liberal levels of risk.
- Anxiety for income dominates planning activities.
- The bank engages in new loan products or initiatives without conducting sufficient due diligence testing.
- Loan management and personnel may not possess sufficient expertise and/or experience.
- Responsibilities and accountabilities in the origination, administration, or problem loan management processes are unclear.
- The bank may not identify concentrated exposures, and/or identifies them but takes little or no actions to limit, reduce, or mitigate risk.
- Concentration limits, if any, are exceeded or raised frequently.
- Compensation structure is skewed toward volume of loans originated, rather than quality.
- There is little evidence of accountability for loan quality in the origination and/or administration function.
- Staffing levels throughout the origination and/or administration function are low.
- Skills throughout the origination and/or administration function are low.
- Credit policies are deficient in one or more ways and require significant improvement in one or more areas. They may not be sufficiently clear or are too general to adequately communicate portfolio objectives, risk tolerance, and loan judgment and risk selection standards.
- The bank approves significant policy exceptions, but does not report them individually or in the aggregate and/or does not analyze their effect on portfolio quality. Policy exceptions do not receive appropriate approval.
- Credit analysis is deficient. Analysis is superficial and key risks are overlooked.
- Risk rating and problem loan review are deficient and require improvement. Problem loans and advances are not identified accurately or in a timely manner; as a result, portfolio risk is likely misstated.
- The bank’s risk ratings (including the classification system) frequently deviate from BB’s risk ratings or classifications.

- The graduating of internal risk ratings in the standard and special mention categories is insufficient to stratify risk for early warning or other purposes, such as loan pricing or capital allocation.
- Management information systems (MIS) have deficiencies requiring attention. The accuracy and/or timeliness of information is affected in a material way, and portfolio risk information is incomplete. As a result, the Board and senior management may not be receiving appropriate or sufficient information to analyze and understand the bank's credit risk profile.

## 4.5 General Steps in Credit Risk Management

### 4.5.1 Credit Risk Identification

At corporate level, credit risk may be identified by looking at some symptoms, such as, high NPL ratio, average grade of credit portfolio etc. At micro level, a relationship manager may identity credit risk associated with a borrower by looking at the borrower's position in terms of some internal or external factors. Internal risk factors associated with a business borrower may include risk in planning, risk in execution/implementation, risks in marketing, risks in cash flow generation and risks in management. External risk factors may include input/utility availability, Govt. policies, natural calamities, technological obsolescence and political instability.

### 4.5.2 Credit Risk Assessment and Risk Rating

Assessment or measurement of credit risk is very important step in credit risk management. Without assessment or measurement of credit risk, it is difficult to determine risk-based price of bank credit. Moreover, credit risk assessment is important for monitoring and control and mitigation. In our country the risk assessment is done through rating. Risk rating is a key measurement of a Bank's asset quality, and as such, it is essential that ratingis a robust process. All facilities should be assigned a risk rating. All Banks should adopt a credit risk rating system. These rating may be internal rating and externalrating. Internal rating is conducted by bank's employees as per the Internal Credit Risk Rating System (ICRRS) introduced by Bangladesh Bank. External rating, however, is conducted by the External Credit Assessment Institutions (ECAIs) licensed by BSEC. The system should define the risk profile of borrowers to ensure that account management, structure and pricing are commensurate with the risk involved. Where deterioration in risk is noted, the risk rating assigned to a borrower and its facilities should be immediately changed. Borrower Risk Rating should be clearly stated on Credit Applications.

### 4.5.3 Credit Risk Pricing

Pricing, particularly, risk-based pricing is an appropriate instrument that may keep the bad borrowers away from a particular borrower. In a risk-based loan pricing system, a risk premium is added with the base rate. In other words, Risk based Loan Price = Base Rate + Risk Premium. Here, risk premium is added keeping the risk level of the borrower. Such higher interest rate from the low rated borrower is justified on the ground that this type of loan requires higher monitoring cost. However, Borrower's volume exposure as well as negotiation capacity is required to be considered.

### 4.5.4 Credit Risk Monitoring

Credit risk monitoring is very important step in credit risk management. Monitoring starts immediately after the sanction of the loan even before the disbursement of the loan. Monitoring is a continuous process in credit management. It starts with monitoring of the terms and conditions of the loan agreement. Besides, frequent measurement of credit risk can capture the trend in credit risk with a borrower. Measured credit risk data is used as early warning signal intensifying monitoring or initiating exit policy.

### 4.5.6 Credit Risk Mitigation and Control

Credit risk mitigation measures may be of different types. Such measures may include obtaining sufficient eligible security, obtaining appropriate guarantee, completing flawless documentation, taking insurance coverage, keep provision for expected loss, maintain capital adequacy etc. Besides, establishment of strong internal control system may also help in this case. Banks may also go for credit derivatives for credit risk mitigation.

## 4.6 Modern Approach for Measurement of Credit Risk

Modern approach focuses on calculation of expected loan loss. According to the new approach expected loan loss is the function of Probability of Default, Exposure at Default and Loss Given Default. It is expressed as follows-

$$ELL = PD \times EAD \times LGD$$

Expected Loan Loss = Probability of Default× Exposure at Default × Loss Given Default

These terms are briefly discussed below:

- ✓ **Expected Loss (EL)** as the average or mean amount of credit loss to be incurred over a particular time period. The loss is measured as the present value or book value of receivables that will not be collected or will have become unrecoverable and therefore will be written off or otherwise expensed during a particular period of time.
- ✓ The **Probability of Default (PD)** is the percentage probability of a borrower entity to produce a default event as perceived by the lender over a specified period of time, typically one year. The PD is most often stated for a future period beginning immediately, but can also be expressed as a forward default probability beginning in one year for one year.
- ✓ The **Exposure at Default (EAD)** is the total balance owed by the borrower to the particular lender at time of default expressed in currency units.
- ✓ **Loss-given-default (LGD)** is the percentage of EAD that is considered lost, once it has been established that a default has occurred. The LGD is equal to 100% minus the percentage of EAD that will be recovered by way of liquidation of collateral and other post-default collection actions. For the purposes of establishing LGD, the post-default cash flows from recoveries must be discounted back to the time of default at the original internal rate of return of the defaulted contract.

## 4.7 Portfolio Credit Risk Management

Credit portfolio risk is the result of credit concentration risk and systematic risk. Management of systematic risk is difficult and costly exercise. However, concentration risk can be measured and managed.

### 4.7.1 Credit Concentration Risk

Concentration risk arises when any bank invests its most or all of the assets to single or few individuals or entities or sectors or instruments. That means when any bank fails to diversify its loan and investment portfolios, concentration risk emerges. Downturn in concentrated activities and/or areas may cause huge losses to a bank relative to its capital and can threaten the bank's health or ability to maintain its core operations. Various types of concentrations are observed in the credit portfolio of different banks in Bangladesh. These concentrations are listed below:

- Economic Purpose-wise Concentration
- Division-wise Concentration
- Concentration in Medium and Large Industries
- Concentration in Urban Advances
- Concentration in High Interest Rate Advances
- Concentration in Real Estate as Security against Credit
- Concentration in Large Size Loan Account

### 4.7.2 Measurement of Credit Concentration Risk

Credit concentration risk is measured by using various indexes. Four of such indexes are listed below.

- Herfindahl Hirschman Index (HHI)
- Simpson's Equitability Index (SEI)
- Shannon's Index (SI)
- Gini Coefficients (GC)

### 4.7.3 Techniques for Managing Concentration Risk

Banksuseavarietyoftechniquestomanageconcentrationrisk.Amongthemostimportantmethodsare:

***RiskAppetite:***ThebankshoulddefineitsappetiteforconcentrationriskinaBoard-approveddocument.

***Limits:***Thebankshouldnotonlyhaveinternallimitsforlargeexposuresandconnectedcounterparty exposures,butalsohavesector,geographical,andproductlinelimits

***Authorities:***Thebankshouldrequirehigherlevelsofauthoritytoapprovenewcreditsorotherexposuresastheexposureapproachesthelimit

***PortfolioManagement:***Thebankshouldmonitorriskconcentrationscontinuouslyandcloselytocorrectfornewconcentrationsthatmayarise.

***RiskTransfer:***Aswithtraditionalcreditrisk,banksmaymanageconcentrationriskbysellingexcessiveexposuresorrequiringadditionalcollateralorguarantees.

***CapitalBuffers:***ThebankshouldconsiderincreasingitsregulatorycapitalaboveBB’srequiredlimitstohandleincreasedconcentrationrisk.Alternatively,anincreaseingeneralloanlossprovisionscouldofferprotectionagainstlinkedfailuresofcounterparties.

***StressTesting:***Thebankshouldperiodicallysubjectitsmoreconcentratedportfoliostostresstesting,whenadversescenariosareappliedtogeographicaloreconomicsectors,andtoproductlines. Anexampleofa“productline”stresstestisdeterminingtheimpactonthebankofa30percentdropinsingle-familyhouseorapartmentpricesonthemortgageloanportfolio.

### 4.7.4 Various Types of Limits for Reducing Credit Concentration Risk

Bank may impose different types of proactive limits to reduce bank portfolio concentration. These limits are given below.

- Counter-Party limit
- Region-wise Limit
- Large Loan Limit
- Sector-wise Limit
- Currency-wise limit
- Group limit
- Maturity-wise limit
- Collateral limit
- Credit quality Limit
- Setting target industry
- Identifying Restricted sectors
- Identifying avoid sectors

Moreover, credit concentration risk may also be reduced by ensuring scientific diversification. Scientific credit portfolio diversification is done based on the study of the correlation.

## 4.8 Credit Derivatives and Credit Risk Mitigation

Credit derivatives are over the counter financial contracts. Credit derivatives are defined as off-balance sheet financial instruments that permit one party (beneficiary) to transfer credit risk of a reference asset, which it owns, to another party (guarantor) without actually selling the asset. It, therefore, 'unbundles' credit risk form the credit instrument and trades in separately. Credit derivatives may take many forms. Some of them are as follows:

- Credit Default Swap
- Total Return swap
- Loan portfolio swap
- Credit options
- Securitization
- Loan sales

## 4.9 Indicative Questions

1. State the different types of credit default.
2. Discuss the various categories of credit risk.
3. List the main causes of stand-alone credit risk.
4. What are the principles a bank should follow for sound management of credit risk?
5. Briefly explain the general steps of credit risk management process.
6. Define expected loan loss. What are the components of expected loan loss?
7. What is credit concentration? What are the different types of Credit concentration?
8. Write down the techniques for managing concentration risk.

# Module – E
# Credit Documentation and Administration

## 5.1 Concept of Security

One of the most important functions of a bank is to employ its fund by way of loans and advances to its customers and a bank's strength depends considerably on the quality of its loans and advances. In older times, when a banker knew his customers personally and intimately and had complete confidence in the integrity and honesty of a customer, they used to allow loans and advances without a security. The position is quite different today. Banks having a large number of offices over a wide area cannot allow loans and advances without retention of security in one form or the other. Though the banks are now expected to give greater emphasis on the purpose for which the borrower needs money rather than security he can afford to give, security continues to be one of the most important factors which determine to a significant extent the banker's willingness to lend money. Security is obtained as a line of last defense to fall back upon. It is meant to be an insurance against emergency. By taking security, bank acquires a claim upon the assets of the borrower if repayment is not made as planned. The most significant categories of security lodged as cover are: (i) Goods and commodities (ii) Fixed Deposit Receipt (iii) Real Estate (iv) Machinery (v) Gold and gold ornaments (vi) Documents of title to goods (vii) Book debts (viii) Supply bills etc.Security is something deposited as a guarantee of aloan. If the borrower fails to repay the loan then the lender can sale the security to recover the loan. Security is obtained as a line of last defense to get back the loan amount. It is meant to be an insurance against emergency. By taking security bank acquires a claim over the particular asset of the borrower if repayment is not made as per schedule.

## 5.2 Characteristics of Good Security

There are certain qualities which a good tangible security should possess. Some of the important attributes are given below.

- Marketability
- Easy Ascertainment of Value
- Stability of Value
- Storability
- Low Cost of labor and Supervision
- Transportability
- Durability

- Ascertainment of Title
- Easy transfer of title
- Absence of contingent liability
- Yield

In practice, hardly any security possesses all the desirable attributes mentioned above and such defects as exists in the security are sometimes covered by taking a higher margin or insisting on other safeguards, say a guarantee.

## 5.3 Acceptable Security and Valuation

Bank will try to have as much security coverage as possible against each and every credit facility sanctioned to the customers. Security taken against credit facilities shall be properly valued and legally enforceable in accordance with the laws of the country. Security requirement will be determined on case to case basis based on customer's business strength, level of risk bank is undertaking. However, Bank will always prefer to have security equivalent to 1.25 times of the total funded limit. Security may be in the following forms subject to restrictions of regulatory authority:

i) Bank deposit
ii) Gold / gold ornaments
iii) Government Bond
iv) Guarantee given by Government or Bangladesh Bank
v) Bank Guarantee
vi) Land and Building
vii) Share
viii) Stock
ix) Machinery and Equipment
x) Charge on the fixed and floating asset
xi) Pari-passu Charge on fixed and floating assets
xii) Corporate Guarantee of another company backed by Board Resolution.
xiii) Personal Guarantee
xiv) Bill or Receivables
xv) Ownership of vehicles / assets
xvi) Life Insurance Policy
xvii) Post Dated Cheque
xviii) Trust Receipt

xix) Others as deemed acceptable by the approving authority

## 5.4 Valuation

Valuation of assets charged to the Bank is a crucial function, as it has a direct bearing on the amount of loss that the Bank might have to suffer in the event that the Borrower's default. The method of valuation employed, has to be appropriate to the nature of the assets.

All valuations must be supported with factual data, in order to qualify the collateral for credit value; valuator's estimates without supporting documents are not acceptable. Valuation should be conducted by an enlisted Valuator of Bank's choice. Where the exposure is not large, joint valuation by Relationship Manager and another officer of the bank may be accepted since it will not be cost effective. Apart from Valuators valuation independent valuation by Relationship Manager and another Officer should also be carried out.

## 5.5 Legal Vetting

Mortgage documents should be properly vetted by the Bank's Legal Counsel. He/she will also certify that proper documentation, borrower's legal standing and enforcement of securities are in place. Finally, Lawyer's Satisfaction Certificate shall have to be obtained regarding documentation where there are securities/collaterals other than Personal Guarantee and Financial Obligation.

## 5.6 Insurance Coverage

Insurance coverage of the things offered as security is very important. If the goods are not properly insured, the banker's ultimate objective of recovering money may not be possible. Usually the cost of insurance is born by the borrower. Regarding insurance coverage of the goods given as security, the following precautions may be undertaken.

- Policies must be taken out in the joint names of bank and the borrower or in the names of the bank for the account of the borrower. If the policy is in the name of the borrower, he should assign it in favor of the bank. The bank should get the assignment registered with the Insurance Company/Corporation. The only exception to this rule is made in the case of marine policies endorsed in blank. The original policy should remain in the custody of the bank. Due dates of the policies must be diarized to ensure that premiums are paid in time and receipt is kept with the documents executed by the party. Bank should maintain an Insurance Register wherein the particulars of all the policies are entered into.

- The banker should study the policy and ensure that the warranties and conditions are not violated by the borrower. The Insurance Company/Corporation may refuse to settle the claim when it arises, if any condition or warranty is not observed.
- Goods/commodities pledged/hypothecated should not be under-insured. They should be insured for the full value; otherwise, in the event of loss, the principal underlying the "Condition of Average" will apply when the Insurance Company/ Corporation will not be liable for the full amount of the loss but will only reimburse the insured proportionately.
- Uninsured goods should not be allowed to be stored with insured goods. If they are stored in the same godown, the entire stocks would have to be fully insured.
- All policies must include the "Bank Clause", also known as "Mortgage Clause" which generally gives better security to the bank. This clause provides, inter-alia, that notice in all matters shall be given to the bank by the Insurance Company/Corporation, and all claims shall be paid to the bank whose receipt shall be valid and complete discharge. Under this clause, the bank can settle or compromise the claim with the insurer without reference to the borrower. It also protects the banker from anything done or omitted to be done by the borrower to the prejudice of the banker's rights without his knowledge, provided he notifies the Insurance Company/Corporation as soon as he knows about the extra hazard and pays the extra premium, if any, on demand.
- If pledged goods are held in the custody of the clearing agents on behalf of the bank, a separate policy in the name of the bank, "A/C the borrower" should be taken.
- The goods or property, which is the subject-matter of insurance and the godowns, where goods have been stored, must be correctly described in the proposal/policy. There should be no misrepresentation or misstatement on any point. They can avoid the contract on grounds of misrepresentation or fraud.
- In case of damage to the insured stocks or property, the Insurance Company/ Corporation must be apprised immediately of the position, preferably by a telegram or over telephone. A letter of confirmation should invariably follow.

- In case a claim has been paid by the insurer, under a fire or any other type of insurance, the sum insured is reduced by the amount paid. If the policy has to be reinstated to the original amount, the insurer has to be approached for the purpose and additional premiums paid. In case the borrower closes his advance account, the relative insurance policy duly assigned in his favor, should be handed over to him against his acknowledgement.

## 5.7 Margin and Drawing Power

Margin is the amount invested in the unit by the borrower himself and is asked for providing protection to bankers against a possible decline in value. It indicates the owner's stake which very often governs his motivation. In other word, margin is a cushion against fluctuations in value of security. Difference between the value of the security and the amount up to which the borrower can draw is known as margin. On the other hand, the amount up to which the borrower can draw is called drawing power (DP). In other word, value of the security less margin is DP. The drawing power of a limit is determined and fixed by the sanctioning authority. Margin will be determined on the basis of cost price and market price whichever is lower or any other prices as specified in the sanction letter. Percentage of margin depends on marketability and fluctuation in price of the security, Bangladesh Bank directives, credit worthiness of the borrower and banker-customer relationship. All release of limit must be channelized through drawing power register.

## 5.8 Creating Charges on Security

Charge is the legal right to assets securing the payment of money. It gives the creditor in whose favor the charge is created, the right to get the loan back on time. In a charge there is no transfer of interest or property. It is a right over some tangible asset of the borrower. It is a legal transaction as a result of which the lender acquires certain right over the property and the borrower is refrained from dealing in them. If the borrower fails to repay the loan on time, then the lender can establish their right over the assets and entitle to get benefit from the assets and can sale the assets to recover the loan.

## 5.9 Modes of Creating Charge on Securities

Charging a security means making it available as a cover for an advance. The manner by which some articles or commodities or properties are made available to a banker, as security is known as charging over securities. The common methods of charging securities are given below:

### 5.9.1 Pledge

Pledge is a usual method of obtaining possessions of goods offered as security. As per Section 172 of Contract Act, 1872, Pledge is a bailment of goods as security for payment of a debt or performance of a promise. The person who delivers the goods (bailor) as the security is called the Pledger and the person to whom the goods are delivered are called Pledgee. Bailment is the delivery of goods from one person to another person for some purpose under a contract, and for a specific period. Upon completion of the bailment period the bailed goods should be returned to the bailor. Thus, in case of a Pledge -

- There should be bailment of goods
- The objective of such bailment should be to hold the goods as security for the payment of a debt or the performance of a promise.

The following are the essential characteristics of bailment:

- Bailment is always based upon a contract.
- There can be a bailment of moveable properties only; transaction of money is not included in the category of moveable goods i.e. deposit of money is not bailment.
- There should be a delivery of goods. Delivery of goods means transfer of possession, actual or constructive from one person to another person. Delivery is constructive when the Pledger does something with the intension of placing the Pledgee in possession of the goods. For example: Handing over the keys of the godown with the intension of transferring the possession of the goods.
- In bailment ownership is not transferred, but only special rights of retaining the goods for the security is passed on to the lender until payment of the debt.
- In bailment goods are delivered with a condition that, the bailee will be bound to return the goods to the bailor upon accomplishment of the purpose the bailed goods.

***Rights of the Pledger***

- The pledger has a right to claim back the security pledged on repayment of the debt with interest and other charges.

- The pledger has a right to receive a reasonable notice in case the pledgee intends to sell the pledged goods, in case the pledger does not receive such notice, the pledger has a right to claim any damage caused to him.
- In case of sale, the pledger is entitled to receive from the pledgee any surplus that may remain with him after the debt is completely paid up.
- If the debt is satisfied from the sale of a portion of the pledged security, then the pledger is entitled to receive back the remaining unsold security.
- If any loss incurs to the goods, because of negligence of the pledgee then pledger has the right to claim the damage caused to him.

***Obligations of the Pledger***

- A pledger must disclose to the pledgee any material fault or risk in the goods to be pledged. If the pledger fails to do so the pledger may be responsible to the pledgee for damages.
- A pledger is bound to pay any extraordinary expenditure incurred by the pledgee for the safe keeping of the pledged goods.
- Where the pledge has exercised his right of the sale of goods the pledgor is liable to make good the shortfall, if thereby any.
- The pledger is liable for any loss caused to the pledgee because of defects in pledger's title to the goods.

***Rights of Pledgee***

- The pledgee has a right to retain the goods pledged to him till the debt, together with the interest due thereon and the expenses for preservation of the goods are fully repaid by the pledgor.
- The pledgee has no right to retain his possession over the goods pledged for any debt or promise other than the debt for which they were pledged, unless otherwise provided for, by a contract.
- In case of default by the pledgor to make payment of the debt, the pledgee has the right either –
  - ✓ To file a suit against the pledgor for the amount due and retain the goods as a collateral security; or
  - ✓ To sell the goods pledged after giving the pledgor reasonable notice of sale.

***Obligations of the pledgee***

- The pledgee has to take reasonable care of the pledged goods.
- The pledgee cannot make an unauthorized use of the pledged goods.
- The pledgee is bound to return the goods on payment of the debt.
- The pledgee will pay the pledger any benefit accrued from the pledged goods.
- The pledgee is responsible to the pledgor for any loss, destruction or deterioration of the goods, if the pledgee does not return the goods at proper time.

### 5.9.2 Hypothecation

The mortgage of movable property is called hypothecation. Hypothecation is a charge against property for a debt where neither ownership nor possession is passed to the creditor. Actual possession of the goods remains with the borrower. Though the borrower holds the actual physical possession of the goods but the constructive possession remains with the bank as per deed of hypothecation. Hypothecation is a legal transaction, whereby goods may be made available as security for a debt without transferring either the property or the possession to the lender. "The borrower is in actual physical possession but the constructive possession is still of the bank because, according to the deed of hypothecation, the borrower holds the actual physical possession not in his own right as the owner of the goods but as the agent of the bank".

***Features of Hypothecation***

- Hypothecation is a floating charge on the borrower’s assets.
- The possession of the bank in hypothecation is not very safe.
- Goods remain in the possession of the borrower.
- Bankers do not offer hypothecation for all borrowers.

***Precautions to be Taken by the Bank under Hypothecation***

As in hypothecation the goods remain in the possession of the borrower, so the facilities should be granted only to those parties whose financial stability and commercial integrity is beyond doubt. The position of the banker under hypothecation is not as safe as pledge. The banker must take the following precautions.

- Banker should allow this facility only for the clients having sound financial condition, integrity and business ethics.
- The first statement of the stock must be obtained at the time of execution of documents and verified and the same is generally attached with the hypothecation documents.

- Periodic statement of stock should be obtained duly signed by the authorized person.
- The bank should ensure that the applicant is not enjoying similar facilities with other banks.
- The bank officials must conduct periodic inspection of goods hypothecated. Where inspection by the bank officials is not possible, the godown keeper should be asked to send periodic report.
- Stock should be fully insured against fire, burglary and other risks.
- The banker should take some collateral security sufficient in value such as mortgage of immovable property as additional security.
- Banker should not allow finance against perishable items.
- A nameplate of the bank mentioning that the stocks are hypothecated with the bank should be displayed in a prominent manner in the business premises of the borrower for the public notice.

### 5.9.3 Lien

Lien is the right of one person to retain goods and securities in his possession belonging to another until certain debt due. Lien does not give power of sale but only to retain the property.

***Types of Lien***

- **Particular Lien:** Particular lien is a right of the creditor to retain the goods of the debtor in respect of a particular debt i.e. the right to retain particular commodity in respect of which the particular debt arises.
- **General Lien:**A general lien confers a right to retain goods and securities not only in respect of a particular debt but also with some other assets of the borrower.
- **Banker's Lien:** As a general rule the right of lien does not give the person exercising the right of sale. A banker's lien is more than general lien, banker has a right to sell the property providing reasonable notice to the borrower.
- **Negative Lien:**Banks enjoy a general lien on all securities of the borrowers until the entire bank's claims are satisfied. There is, however, another kind of lien which is called Negative lien. In this case banks take a declaration from the borrower that the assets mentioned therein will be free from any sort of charge.
- **Equitable Lien:** An Equitable Lien is an equitable right conferred by law to a charge upon the movable or immovable property of another until certain claim is satisfied

such as, a partner who pays partnership debts on dissolution has an equitable lien on the property of the partnership.

- **Maritime Lien:** A Maritime Lien is a right specially binding a ship her furniture, machinery, cargo and freight for the payment of claim based upon the maritime law. For example, the person who has suffered losses as a result of collision due to ship's negligence has the right of lien on ship and her belongings.

***Conditions for Exercising the Rights of Lien***

- The assets over which the right is to be exercised must be in possession of the creditor who will exercise it.
- There must be a lawful debt due to the person against lien.
- There must not be any contract to the contrary i.e. safe custody contract etc.

***Banker does not have lien over the following items***

- Credit balance of deposit account of the borrower.
- Securities received by Bank for sale.
- Goods or securities left by the customer in the Banker's hands inadvertently.
- Money deposited for a special purpose.
- Instruments deposited for collection.
- Articles deposited for safe custody etc.

### 5.9.4 Assignment

Assignment means transfer of an existing or future right, property or debt by one person to another person. The person who assigns the right is called the assignor. The person to whom the right etc. is transferred is called assignee. In other words, while the Transfer of Property Act provides creation of charge over immovable property by way of mortgage, the same Act provides assignment of "actionable claims", e.g., book debts, insurance claims etc.

In banking, an actionable claim is the subject of assignment. It is permissible under Section 130 and 136 of the Transfer of Property Act, 1882 to assign "actionable claims" to anyone except to a judge, a legal practitioner or an officer of the Court of Justice. Section 3 of the Transfer of Property Act 1882 defines actionable claim as, "Actionable claim means a claim to any debt other than a debt secured by mortgage of immovable property or by hypothecation or pledge of movable property or to any beneficial interest in movable property not in the possession either actual or constructive, of the claimant, which the Civil Courts recognize as affording grounds for relief, whether such debt or beneficial interest be existent, accruing, conditional or contingent". In other words, an actionable claim is an unsecured claim to money which is actionable, i.e., for recovery of which an action may be brought in the Court of law.

***Types of Assignment***

***Legal Assignment***

A Legal Assignment is one where,

- Assignment must be in writing duly signed by the assignor. In banking practice, it is done through a registered irrevocable power of attorney where transfer of actionable claim is clear and absolute.
- A written notice of assignment containing the name and address of the assignee is to be sent by the assignor to the debtor.
- The assignee informs the principal debtor about the assignment and also gets the confirmation of the notice. In banking business, banker informs the assignor's debtor with a copy of power of attorney and gets the confirmation of it.

***Equitable Assignment***

An equitable assignment is one which does not fulfill any of the above. Banker does not allow equitable assignment in any case. The most common types of assignment in banking business are –

- Contract Money.
- Supply Bills.
- Life Insurance Policy

Assignment as security is not a good one due to following reasons:

- Breach of the terms of contract between assignor and his debtor may hamper the interest of Banker.
- Value of the assignment does not depend only on the integrity and credit worthiness of assignor but also on the assignor's debtor.

- The assignor's debtor can exercise his right of set off, if the assignor has any debt to him.

### 5.9.5 Set off

It is, in effect, the combining of accounts between a debtor and a creditor so as to arrive at the net balance payable to one or the other. Set-off may be available between parties as a statutory right; or by an agreement between parties, express or implied from a course of dealings. The right of set-off enables a banker to adjust wholly or partially, as circumstances permit, a debit balance in a customer's account with any balance lying at his credit. Both these claim must, however, be for known amounts in the same right and due immediately. In practice, the banker would not exercise the right arbitrarily and without notice unless there is a specific agreement with the customer to set-off the accounts.

***Essential Features of Set Off***

- Mutual debt must be for sums certain: Before exercising the right of setoff the claim and the counter claim must be determined accurately.
- Only those debt, which are due and recoverable on the date of set off, can be subject of set off.
- The parties mutually indebted in the same right. If a customer maintains two accounts one for his own money and other for the trust money, the banker cannot set off a credit balance in the trust account.
- The right of set off cannot be exercised if there is an agreement between banker and borrower.
- Before exercising the right of set off banker must serve notice of setoff to the borrower with reasonable time.

***Notice of Set-off***

Banker should give reasonable notice to the customer of its intention to exercise its right of set-off; otherwise it may face troubles. So, it is better for a banker to obtain a letter of set-off signed by the customer before disbursement of loan so that he can exercise his right of set-off without notice.

It is noted that without serving any notice banker can exercise his right of set off in the following cases even before the loan becomes due:

- On the death, insanity or insolvency of the customer.
- On the insolvency of a partner of a firm.
- On the winding up of a company.
- On receipt of a garnishee order.
- On receipt of information of a second mortgage over the security witch is charged to the Bank.
- On receipt of a notice of assignment of the credit balance of the customer.

### 5.9.6 Mortgage under the Transfer of Properties Act and Registration Act

As per section 58 of The Transfer of Property Act, 1882, mortgage is transfer of interest in specific immovable property for the purpose of securing the payment of money advanced or to be advanced by way of loan, an existing or future debt or the performance of an engagement which may give rise to pecuniary liability.

The transfer of property Act, 1882 (Act No. IV of 1882, dated February 17, 1882) came into force on the First day of July, 1882. The Transfer of Property (Amendment) Act, 2004 came into force on the first day of July, 2005. There are 137 sections under 8 chapters. As per Section 6 of this Act property of any kind may be transferred, except as otherwise provided by this Act or by any other law for the time being in force. According to section 4 of the Transfer of Property Act, 1882, other Acts are related to this Act like the Contract Act, 1872, the Stamp Act 1899, and the Registration Act, 1908. Particularly Registration Act is a part and parcel of Transfer of property Act. The Registration Act, 1908 (Act No. xvi of 1908) and subsequently the registration (Amendment) Act, 2004 came in to force on the first day of July, 2005.

Transfer of property means an act by which a living person conveys property, in present or in future, to one or more other persons, or to himself and one or more other living persons. Here ‘living person’ also includes a company or association or body of individuals (Sec. 5). The transfer of property at the consent of parties concerned may also be in different forms:

(a) Sale (Sec. 54)
(b) Mortgage etc. (Sec. 58)
(c) Lease (Sec. 105)
(d) Exchange (Sec. 118)
(e) Gift (Sec. 122)

The term ‘immovable property’ consists of land or attachments to it like trees, building, fixed machinery, etc. A machine/fixture attached to earth will be immovable property or not, will depend upon the degree of annexation and the object of annexation. If the plant and machinery is so embedded to earth that its removal from its place will affect its utility and it may not serve its original purpose. Attachment to the earth means-

- Rooted in the earth, as in the case of trees;
- Imbedded in the earth, as in the case of walls or buildings; or
- Attachment to what is so imbedded for the permanent beneficial enjoyment of that to which it is attached.

Every person competent to contract and entitled to transferable property, or authorized to dispose of transferable property not his own, is competent to transfer such property either wholly or in part, and either absolutely or conditionally, in the circumstances, to the extent and in the manner allowed and prescribed by any law for the time being in force (Sec. 7). Every person is competent to contract who is of the age of majority according to the law to which he is subject, and who is of sound mind, and is not disqualified from contracting by any law to which he is subject (Sec 10 of the Contract Act, 1872)

It is stated in section 8 of the Transfer of Property Act, 1882 that unless a different intention is expressed or necessarily implied, a transfer of property passes forthwith to the transferee all the interest which the transferor is then capable of passing in the property, and in the legal incidents thereof.

- Where the property is land, the easements annexed thereto, the rents and profits thereof accruing after the transfer, and all things attached to the earth;
- Where the property is machinery attached to the earth, the moveable parts thereof;
- Where the property is a house, the easements annexed thereto, the rent thereof accruing after the transfer, and the locks, keys, bars, doors, windows, and all other things provided for permanent use therewith;
- Where the property is a debt or other actionable claim, the securities therefore (except where they are also for other debts or claims not transferred to the transferee), but not arrears of interest accrued before the transfer;
- Where the property is money or other property yielding income, the interest or income thereof accruing after the transfer takes effect.

### *Transfer of Property under Mortgage*

Mortgage is the transfer of an interest in specific immovable property for the purpose of securing the payment of money advanced or to be advanced by the way of loan, an existing or future debt or the performance or an engagement which may give rise to a pecuniary liability. The transferor is called a ‘mortgagor’, the transferee a ‘mortgagee’, the principal money and interest of which payment is secured for the time being are called ‘mortgage money’, and the instrument (if any) by which the transfer is affected is called a ‘mortgage deed’ (Sec. 58A).

### *Different Forms of Mortgage*

- Simple mortgage (Sec. 58B): Without delivering possession.
- Mortgage by conditional sale (Sec. 58C): On default of payment of the mortgage-money on a certain date the sale shall become absolute.
- Usufructuary mortgage (Sec. 58D): Delivers possession and authorizes mortgagee to receive the rents and profits accruing from the property as a part of payment
- English mortgage (Sec. 58E): Transfers the mortgaged property absolutely to the mortgagee, but subject to a proviso that he will re-transfer it to the mortgagor upon payment of the mortgage-money as agreed.
- Mortgage by Deposit of title deed (Sec. 58F): Where a person in the town of Dhaka, Narayangonj and Chittagong and in any other town, which the Government may specify in this behalf, delivers to a creditor or his agent documents of title to immoveable property, with intent to create a security thereon.
- Anomalous mortgage (Sec. 58g): Other than the above forms.

*Note: Now all mortgages must be registered mortgage.*

### *Special Types of Mortgages*

- **Second Mortgage:** Once a free holder has already mortgaged his property and wishes later to borrow more on the same property, he can do so by a second mortgage if, of course, there is enough margin in the value of property.

- **Sub-Mortgage:** If a lender himself wishes to borrow money on the security of a mortgagor’s promise to repay him, he can produce to his banker the mortgage deed. If the banker is satisfied the advance may be made on the security of the mortgage deed.

- **Token Mortgage:** Token mortgage is a registered mortgage where only a token amount is registered by a deed securing covering the token amount of loan and the rest loan amount is covered by submitting simply an agreement to create further charge.

***Rights of a Mortgagee***

- Right to foreclosure
- Right of suit for sale
- Right to sue for mortgage money
- Right of sale without intervention of the Court
- Right to spend money
- Right to accession to mortgaged property
- Right of possession

***Rights of Mortgagee in Possession***

As per section 72 of the Transfer of Property Act, 1882, a mortgagee may spend such money as is necessary:

- for the preservation of the mortgaged property from destruction, forfeiture or sale;
- for supporting the mortgagor's title to the property;
- for making his own title thereto good against the mortgagor; and
- when the mortgaged property is a renewable lease-hold, for the renewal of the lease; and
- interest on the additional amount incurred (at the fixed rate of interest and where no such rate is fixed, at the rate of nine per cent per annum)

***Rights of a Mortgagor***

- Right of redemption
- Transfer to third party
- Inspection and production of documents
- Additions to property

***Inclusion of New Sections in the Transfer of Property (Amendment) Act, 2004***

No immovable property under registered mortgage shall be re-mortgaged or sold without the written consent of the mortgagee, and any re-mortgage or sale made otherwise shall be void (Sec.53D). Every instrument of sale, gift, mortgage and declaration of heba of any immovable property shall be supported by an affidavit by the executants affirming that he has lawful title to the property (Sec.53E).

***Inclusion of New Sections in the Registration (Amendment) Act, 2004***

Every instrument of transfer required to be compulsorily registered under this Act shall contain the particulars necessary to convey the intention of the parties, complete description of the properties to be transferred and nature of the transaction. Photographs of both the executants and the recipient shall be pasted on every instrument and the parties shall sign and put their left thumb impressions across their photographs in the instrument (Sec. 22A).

Registration fee payable for registration of an instrument of mortgage shall be (Sec.78A):

| | |
|---|---|
| (i) Where the amount of money to be secured does not exceed five lac taka. | 1% (one per centum) of the amount of money to be secured, but not less than two hundred taka and not more than five hundred taka; |
| (ii) Where the amount of money to be secured is above five lac taka but does not exceed twenty lac taka- | 0.25%(zero point two five per centum) of the amount of money to be secured, but not less than fifteen hundred taka and not more than two thousand taka; and |
| (iii) Where the amount of money to be secured is above twenty lac taka- | 0.10% (zero point one zero per centum) of the amount of money to be secured, but not less than three thousand taka and not more than five thousand taka. |

Stamp Duties for mortgage as per the Stamp Act, 1899 are as follows:

- If mortgage money is up to 10 lac then stamp duty is Tk. 1500.
- If mortgage money is 10 lac to 50 lac then stamp duty is Tk. 3500.
- If mortgage money is over 50 lac then stamp duty will be 0.1% of remainder

***Required Documents for Mortgage over Property***

- Original purchase deed and along with Bia deed(s)
- SRO Certified copy purchase deed plus endorsed Deed delivery receipt(interim period)
- Non-encumbrance Certificate with search fee paid receipt.
- Certified Mutation Khatian including mutation fee paid receipt (DCR)
- S.A.,C.S.,R.S. Khatian(s),
- Up to date rent paid/municipal tax paid receipt(s) etc.
- Valuation Certificate - along with FSV
- Lawyers confirmation

- Guarantee of third-party mortgagors.
- Board Resolution if the property is in the name of Limited Co.
- Memorandum of Association to check Mortgage authority of company's property
- Insurance Covering Construction value.
- Certified Math Khatian
- Location Map (if there is no holding number or outside main city).
- Re-valuation Certificate - along with FSV every 3rd year.
- Topographical survey map on Mouza Map for agricultural lands or covering the property where holding number is not available.
- Power of Attorney

## 5.10 Documents and Documentation

It is the responsibility of credit administration to ensure completeness of documentation (loan agreements, guarantees, transfer of title of collaterals etc.) in accordance with approved terms and conditions. Outstanding documents should be tracked and followed up to ensure execution and receipt.

The credit administration should ensure that the credit application has proper approval before entering facility limits into computer systems. Disbursement should be effected only after completion of covenants, and receipt of collateral holdings. In case of exceptions necessary approval should be obtained from competent authorities.

### 5.10.1 Documentation

**Document:**"Document" means any written record which serves as an evidence in respect of a transaction. According to the Indian Evidence Act-1872 (Section-3), "Document means any matter expressed or described upon any substance by means of letters, figures, marks or by more than one of these means intended to be used or which may be used for the purpose recoding that matter."Thus, anything which is obtained for the purpose of recording is called document.

**Documentation:**Documentation is the execution of documents in right form and lawful manner. Documentation forms a permanent record of the rights responsibilities and obligations of the executants that the borrowers and guarantors towards the lender (Bank).It refers to the process involved in taking documents right from drafting to the execution and ultimate recording in the appropriate register.

### 5.10.2 Importance of Documentation

- Documentation does establish a legal relationship between the lending banker and the borrower
- Documentation assumes the character of primary evidence in any dispute between the parties of loans and advances
- Documentation comes to the rescue of the banks in the court of law

Before starting documentation, bank officer who takes documents must consider the following preconditions:

- Nature of Advance and purpose
- Nature of Borrower
- Nature of Security and Mode of Charging
- Charge requiring registered or not
- Charge documents to be stamped or not,
- If stamped amount and types of stamp.
- Special Conditions for document as per sanction advice
- Capacity of Executants and signing Capacity
- Bank’s supplied printed document sets and their contents.

### 5.10.3 Steps Involved in Documentation

- Drafting of documents
- Filling of documents of printed nature
- Execution of documents
- Stamping & checking of impersonation etc.
- Obtaining additional papers, if necessary like affidavits, certificates, undertaking and declaration etc.
- Registration
- Witnessing
- Signature Verification
- Recording of documents in the register & Preservation

### 5.10.4 General Guidelines for Proper Execution of Documents

The following precautions should be taken in the matter of proper execution of documents:

- The documents should be executed in the presence of the Manager or any other authorized officer of the bank.
- The documents should be signed in full signature and not in initials. The borrower's signature should be obtained on each page and all cuttings, alterations, over writings should be authenticated under full signatures.
- All documents should be dated.
- The date on the promissory note and the date on other documents should be the same. Documents should be taken on Bank's standard forms.
- No addition, deletion or replacement should be permitted in the printed language of the document without consulting the legal adviser since the banker may not be able to foresee the possible consequences of such a change.
- Where borrower is an illiterate person, content of the documents should be explained with the help of lawyer or a respectable person.
- Unless there is specific required in the documents it should not be got attested or witnessed.
- The documents should be adequately and correctly stamped.
- The promissory notes should be stamped with revenue stamps and not postage stamps. The signatures of the borrower should be partly on the revenue stamp affixed and partly on the space in the same line.
- All documents taken should be entered in the Documents Register.
- Documents should be kept in envelopes since punching for the purpose of filing may deface some important parts of the documents.
- All envelopes containing documents arranged according to serial number of the register should be lodged overnight in the strong room.
- Branches should maintain a due date diary for expiry dates of the documents.
- No amount should be advanced until all the requisite documents have been properly executed by all the parties concerned, including the guarantor.

## 5.11 Indicative Questions

1. What are the essential characteristics of good security?
2. How will you determine the value of different types of securities?
3. Why is insurance coverage of the security important?
4. What do you mean by margin and drawing power?
5. What do you mean by creation of charge on security?
6. Describe the different modes of creating charge on securities?
7. What are the essentials of pledge?
8. ‘Pledge is preferable to lenders but hypothecation is preferable to borrowers’-Explain.
9. What are the rights of the pledger?
10. What are the obligations of the pledger?
11. What are the rights of the pledgee?
12. What are the obligations of the pledgee?
13. What is hypothecation?
14. What are the circumstances under which hypothecation appropriate?
15. Distinguish between hypothecation and pledge.
16. What are the different features of hypothecation?
17. Discuss the different types of lien.
18. Discuss assignment process with example.
19. What are the essential features of set off?
20. What are the different types of mortgages?
21. State the rights of the mortgagee.
22. State the rights of the mortgagor.
23. State the rights of the mortgagee in possession.
24. List the required documents for creating mortgage over property.
25. What is documentation? What are the steps in documentation?

# Module – F
# Supervision and Follow-up of Loans and NPL Management

## 6.1 Introduction

It should be remembered that selection of appropriate borrowers, proper monitoring and end-use supervision through constant close contact with the borrowers, are the cornerstones for timely recovery of every credit.Before sanctioning a loan, a banker carefully evaluates and appraises the loan proposal of the borrower to determine their bank ability on the basis of principles of sound lending.Simply an appraisal of loan proposal is not a guarantee against risk of non-payments by the borrowers. This is only a part of the job.

Important responsibilities of the lending banker are to follow-up and supervise the use of the credit.Supervision and follow-up function in banks have assumed considerable significance due to increasing trend of sickness in almost all the sectors of credit including SMEs.Supervision and follow-up are closely related. Supervision gives more emphasis on proper end-use and follow-up gives emphasis on timely recovery of credit.By supervision we mean to have a proper control over the borrowers' operation to ensure the end- use of funds. Supervision keeps track of the end- use of fund lent.

## 6.2 Supervision, Monitoring and Follow-up

Supervision ➡ Starts right after the selection of the borrower

Monitoring ➡ Starts when the project/activity enters implementation phase.

Follow-up ➡ Starts just after disbursement of loan

**Methods of Supervision**

Desk /Off-siteSupervision

- Periodic Reports
- Discussion
- Operating Statements and Cash Flow Statements

Field /On-siteSupervision

- Visits
- Nominee Directors

## 6.3 Credit Monitoring

Monitoring is a process of ensuring that performance takes place in conformity with the plan. An effective system of monitoring can help in detection of signals / symptoms of sickness in units for initiating timely corrective action.

- Minimize credit losses
- Return flow of funds
- Compliance of Terms and Conditions
- Problem Solving
- Feedback
- Taking timely corrective action
- Review of Borrower Relationships / Loan Facilities.

### 6.3.1 Monitoring basically Involves Three Steps:

- Measuring
- Reviewing
- Reporting

Loan monitoring requires information and use of judgment. An information system provides data for analysis and judgment.

**Monitoring when?**

- During Implementation stages
- During Operation stages.

### 6.3.2 How to Ensure an Effective Credit Monitoring System?

- ✓ The bank should periodically obtain and scrutinize the current financial statements of the borrower.
- ✓ Systems should be in place to ensure that covenants are complied with, and any violation is immediately noticed.
- ✓ The system should ensure that the security coverage for the advances granted is not diluted.
- ✓ Payment defaults under the loan contract should be immediately noticed.
- ✓ Loans with the potential to run into problems should be classified in time to initiate remedial action.

- ✓ While individual borrowers should be subjected to intense monitoring, banks also need a system for monitoring the overall composition and quality of the credit portfolio.

## 6.4 Credit Review

A sound credit review process is necessary for the long-term sustenance of the bank. Once a credit is granted, it is the responsibility of the business unit, along with a credit administration support team, to ensure that the credit limit is being operated well, credit files, financial information and other information are updated periodically and the account is 'monitored', to ensure that the debt is serviced on time.To minimize credit losses, monitoring procedures and systems should be in place which will provide an early indication of the deteriorating financial health of a borrower.

- ✓ The structure of the credit review process would have to periodically examine the assumptions on which every loan was appraised and granted, and whether these assumptions have changed materially enough to endanger the debt-servicing capacity of the borrower. Typically, all or most of the following aspects are reviewed for every loan till it is repaid in full.
- ✓ Developments in the economy that may have an impact on the industry in which the borrower operates.
- ✓ Developments in the industry or sector in which the borrower operates.
- ✓ The borrower's financial health. Is the credit adequate? Has the borrower over-or under-borrowed? Can the borrower sustain debt service without default?
- ✓ The borrower's payment record in this and other loans so far.
- ✓ The quality, condition and value of the prime and collateral securities.
- ✓ The completeness of loan documentation, and developments in law governing the instruments effecting credit delivery.
- ✓ Adherence to loan covenants. Is there a danger of violating one or more of these? How critical are these violations for the debt service and the long-term relationship with the borrower?
- ✓ Central banks of most countries have devised country-specific definitions and control systems to tackle 'sick' borrowers. There are three categories of sickness that could afflict borrowers.
- ✓ Sickness at birth—the project itself has become infeasible either due to faulty assumptions or a change in environment.
- ✓ Induced sickness - caused by management in competencies or willful default.

- ✓ Genuine sickness - where the circumstances leading to sickness are beyond the borrowers' control, and has happened in spite of the borrowers' sincere efforts to avert the situation.

**6.4.1 When the Borrower Turns 'Sick', the Bank will have to Investigate -**

- the reasons for sickness, and whether remedial measures can revive the ailing firm;
- the rationale for categorizing the borrower as 'sick';
- the risks involved in rehabilitating the borrowing firm and
- in case the bank decides to rehabilitate, the requirements for such revival in the form of additional financing, government support, management inputs or upgraded technology.

**6.4.2 Stage-wise Supervision, Monitoring and Follow-up**

**Pre-sanction (selection of the borrower):**

- ✓ Confirm identification of the applicant.
- ✓ Confirm all the address given.
- ✓ Confirm nature/Type of business mentioned.
- ✓ Pre-investment feasibility study.
- ✓ Whether Credit Risk Grading has been done.
- ✓ Confirm title of the properties (proposed security).
- ✓ Legal opinion regarding title of the properties etc.

**Post-sanction and Pre-disbursement:**

- ✓ Whether all terms and conditions conveyed to the applicant.
- ✓ Acceptance of the terms and conditions by the applicant.
- ✓ Whether legal opinion obtained regarding title documents and other relevant papers.
- ✓ Whether all documentation formalities observed.
- ✓ Confirm identification of the Guarantor (if any).

**Post-disbursement:**

- ✓ regular review of transaction in the accounts
- ✓ ensure repayment of principal and interest.
- ✓ ensure satisfactory rotation of pledge/hypothecation stock
- ✓ physical verification of stocks at regular interval.
- ✓ ensure no loss in quality and quantity of the goods kept as security.
- ✓ stocks to be duly insured
- ✓ personal visit to business site

- ✓ visit securities and confirm title
- ✓ borrowers to be called on or served notice for any unsatisfactory transaction or on failure to repay as per terms of sanction.

## 6.5 Problem Loan

A loan to a borrower whose financial profile may deteriorate or where a payment schedule has been breached or where the bank's secured position is likely to deteriorate.Any occurrence which may lead the bank to believe the loan has developed a higher risk thensuch loans will be considered problem loans and treated accordingly.

### 6.5.1 Causes of Non-Performing Loan

Fluctuations in the economy may weaken some businesses. Serious health problems of the borrower may imperil their ability to repay any outstanding loans.The bank's loan department must be sensitive to these developments and periodically review all loans until they reach maturity. Some of the causes of NPL is summarized below:

- Wrong selection of borrowers etc.
- Inaccurate appraisal/Inflated appraisal/Over costing of the project. Reasons- Political pressure, pressure from high-ups, under hand dealing/bribe
- Inadequate information & improper investigation
- Too high debt-equity ratio
- Financing in non-viable projects
- Saturated sectors
- Low rate of return
- Over invoicing
- Faulty documentation
- Defective security
- Down turn in the economy
- Global recession
- Prolong illness of the borrower
- Lack of business management
- Non-Performing loan
- Bad Investment
- Lack of Supervision and Monitoring
- Unholy alliance

### 6.5.2 Why does Delinquency Happen?

There are two major factors which cause delinquency:

- Uncontrollable
- Controllable

While some factors may be considered uncontrollable, the Bank can still mitigate their effects.

| Uncontrollable Factors | Example |
|---|---|
| 1. Natural calamities | • Typhoons, fires, drought |
| 2. Government policies | • Crackdown on street vendors, increased taxes, relocation of public market |
| 3. Loss of economically active members of the household | • Death, illness |
| 4. Slowdown in the growth of local or national economy | • Increasing food prices |
| 5. Low market price for farm products | • Over supply of farm products |

| Controllable Factors | Example |
|---|---|
| 1. Lack of clear-cut and consistent lending and collection policies | • Absence of collection procedures<br>• Absence of loan policies relating to loan information requirements, collateral, etc. |
| 2. Delinquency control is not a priority | • There is very little effort to collect<br>• Bank's staff complacent in collection<br>• Supervisory Board does not prioritize formulation of loan and collection policies |
| 3. Officers have insufficient knowledge, experience and skills in lending and collecting resulting in poor collection methods | • Collectors or loan officers who prefer or are more suited to office-work types |
| 4. Lack of clear records | • No aging reports |
| 5. Absence of incentives to good payers and absence or inadequate penalties for late payments | • Delinquent borrowers get repeat loans |

### 6.5.3 Early Alert Process

An Early Alert Account (EAA) is one that has risks or potential weaknesses of a material nature requiring monitoring, supervision, or close attention by management.If these weaknesses are left uncorrected, they may result in deterioration of the repayment prospects at some future date. Despite a prudent credit approval process, loans may still become troubled.

### 6.5.4 Symptoms of Early Alert Reporting

- Irregular submission of periodical reports by the assisted concerns
- Declining availability of funds as reflected in the cash-flow statements
- The increase in stock of finished goods
- Irregular payment of institutional dues
- Intentionally delaying plant visit by officials of the bank and non-cooperating them once they are in the factory
- Increase in payable accounts
- Difficulties experienced in realizing company's dues from dealers or customers
- Increase in fixed assets without corresponding long-term funding
- Thoughtless expansion of operations
- Worsening of debt-equity ratio
- Operational losses
- Lack of interest on the part of the management in the company's affairs
- Position within industry rapidly eroding
- Industry may be mature and in long term decline, and/or in a cyclical downturn
- Concerns over the ability of management to effectively manage existing operations, and/or the business expansion/plans
- Operating results are deteriorating and /or working capital cycle deteriorating
- Liquidity strained and need for additional borrowing or capital now or in the near future
- Cash-flow is unlikely to cover both mandatory debt-service (principal plus interest) and other business needed.
- Evidence of misuse of funds or monies diverted into non-core activities.
- Early identification, prompt reporting and proactive management of EAA are prime credit responsibilities of all Relationship Managers and must be undertaken on a continuous basis.

- An Early Alert report should be completed by the Credit officers/RM and sent to the approving authority within seven days from the identification of weaknesses.

## 6.6 Loan Classification and Provisioning

Loan classification and provisioning requires loans and advances to be grouped into various categories namely continuous loan[4], demand loan[5], fixed term loan[6] repayable within five years, fixed term loan repayable in more than five years and short-term agricultural and micro credit. Determining the quality of the loans is a precondition for determining the provision requirement for loans. The better the quality of loans the lower the provision requirement. Quality based loans are categorized as Unclassified (UC), Special Mention Account (SMA), Substandard (SS), Doubtful (DF), and Bad and Loss (BL) representing best to worst quality of loans, respectively. As per the requirement of the policy, loans are to be classified either by using the **objective criteria (overdue period) or qualitative judgement**.

**Objective Criteria of Loan Classification**

| **Types of Loan** | **Unclassified** | | **SS** | **DF** | **BL** |
|---|---|---|---|---|---|
| | **Standard** | **SMA** | | | |
| Continuous | O < 2 | 2 ≤ 0 < 3 | 3 ≤ 0 < 9 | 9 ≤ 0 < 12 | O≥12 |
| Demand | O < 2 | 2 ≤ 0 < 3 | 3 ≤ 0 < 9 | 9 ≤ 0 < 12 | O≥12 |
| Term | O < 2 | 2 ≤ 0 < 3 | 3 ≤ 0 < 9 | 9 ≤ 0 < 12 | O≥12 |
| SAC/MC | O < 12 | | 12 ≤ 0 < 36 | 36 ≤ 0 < 60 | O≥ 60 |

Loan Classification for C/M/S

| **Types of Loan** | **UC** | **SS** | **DF** | **BL** |
|---|---|---|---|---|
| Continuous | O < 6 | 6 ≤ 0 < 18 | 18 ≤ 0 < 30 | O≥ 30 |
| Demand | O < 6 | 6 ≤ 0 < 18 | 18 ≤ 0 < 30 | O≥ 30 |
| Term | O < 6 | 6 ≤ 0 < 18 | 18 ≤ 0 < 30 | O≥ 30 |

[4]The loan Accounts in which transactions may be made within certain limit and have an expiry date for full adjustment will be treated as Continuous Loans. Examples are: CC, OD etc.

[5]The loans that become repayable on demand by the bank will be treated as Demand Loans. If any contingent or any other liabilities are turned to forced loans (i.e. without any prior approval as regular loan) those too will be treated as Demand Loans. Such as: Forced LIM, PAD, FBP, and IBP, etc.

[6]The loans, which are repayable within a specific time period under a specific repayment schedule, will be treated as Fixed Term Loans.

### 6.6.1 Qualitative Judgement: SMA

- ✓ Loan was not made in compliance with the bank's internal policies;
- ✓ Failure to maintain adequate and enforceable documentation; or poor control over collateral;
- ✓ Occasional overdrawn within the past year;
- ✓ Below-average or declining profitability;
- ✓ Barely acceptable liquidity;
- ✓ Problems in strategic planning.

### 6.6.2 Qualitative Judgement: SS

- ✓ Recurrent overdrawn;
- ✓ Low account turnover;
- ✓ Competitive difficulties;
- ✓ Location in a volatile industry with an acute drop in demand;
- ✓ Very low profitability that is also declining;
- ✓ Inadequate liquidity; cash flow less than repayment of principal and interest;
- ✓ Weak management and doubts about integrity of management;
- ✓ Conflict in corporate governance;
- ✓ Unjustifiable lack of external audit and pending litigation of a significant nature;
- ✓ Primary sources of repayment are insufficient to service the debt;
- ✓ The banking organization has acquired the asset without the types of adequate documentation of the obligor's net worth, profitability, liquidity, and cash flow that are required in the banking organization's lending policy, or there are doubts about the validity of that documentation.

### 6.6.3 Qualitative Judgement: DF

- ✓ permanent overdrawn;
- ✓ location in an industry with poor aggregate earnings or loss of markets;
- ✓ serious competitive problems;
- ✓ failure of key products;
- ✓ operational losses and illiquidity,
- ✓ cash flow less than required interest payments;
- ✓ very poor management;

- ✓ non-cooperative or hostile management;
- ✓ serious doubts of the integrity of management;
- ✓ doubts about true ownership;
- ✓ complete absence of faith in financial statements.

### 6.6.4 Qualitative Judgement: BL

- ✓ the obligor seeks new loans to finance operational losses;
- ✓ location in an industry that is disappearing;
- ✓ location in the bottom quartile of its industry in terms of profitability;
- ✓ technological obsolescence; very high losses;
- ✓ asset sales at a loss to meet operational expenses;
- ✓ cash flow less than production costs;
- ✓ no repayment source except liquidation;
- ✓ presence of money laundering, fraud, embezzlement, or other criminal activity;
- ✓ no further support by owners.

### 6.6.5 Accounting of the Interest of Classified Loans

If any loan or advance is classified as ‘Sub-standard’ and ‘Doubtful’, interest accrued on such loan will be credited to Interest Suspense Account, instead of crediting the same to Income Account. In case of rescheduled loans, the unrealized interest, if any, will be credited to Interest Suspense Account, instead of crediting the same to Income Account. As soon as any loan or advance is classified as ‘Bad/Loss’, charging of interest in the same account will cease. In case of filing a law-suit for recovery of such loan, interest for the period till filing of the suit can be charged in the loan account in order to file the same for the amount of principal plus interest. But interest thus charged in the loan account has to be preserved in the ‘Interest Suspense’ account. If any interest is charged on any ‘Bad/Loss’ account for any other special reason, the same will be preserved in the ‘Interest Suspense’ account. If classified loan or part of it is recovered i.e., real deposit is affected in the loan account, first the interest charged and accrued but not charged is to be recovered from the said deposit and the principal to be adjusted afterwards.

### 6.6.6 Maintenance of Provision

The policy also requires keeping provision on different quality of loans at different rates ranging from 0.25% to 100%. Provision rates are given below:

| Category of Loans | Rate of Provisions[7] | |
|---|---|---|
| | **ST-Agri & Micro Credit** | **All Other Credits** |
| Unclassified | 1% | 0.25% for SME<br>1% (Except SE & CF)<br>2% For Small Enterprise &<br>5% for Consumer Financing |
| Special Mention Account (SMA) | | 5% |
| Substandard (SS) | 5% | 20% |
| Doubtful (DF) | 5% | 50% |
| Bad and Loss (BL) | 100% | 100% |

Interest on Substandard (SS), Doubtful (DF) and Bad and Loss (BL) category loans are required to be transferred to interest suspense account instead of crediting to interest revenue account. This exercise on loan classification and provisioning will be done by the banks in every quarter and be reported to Bangladesh Bank. It is mentionable here that BB has issued master circulars later on the issue which is more comprehensive and conservative than that of the existing one[8].

### 6.6.7 Base for Provision

For eligible collaterals of the following types, provision will be maintained at the stated rates in the section 'Maintenance of Provision' on the outstanding balance of the classified loans less the amount of Interest Suspense and the value of eligible collateral:

a. Deposit with the same bank under lien against the loan,

b. Government bond/savings certificate under lien,

c. Guarantee given by Government or Bangladesh Bank.

For all other eligible collaterals, the provision will be maintained at the stated rates on the balance calculated as the greater of the following two amounts:

i. outstanding balance of the classified loan less the amount of Interest Suspense and the value of eligible collateral; and

ii. 15% of the outstanding balance of the loan.

[7] Few exceptional areas are agricultural credit, Consumer credit, SME, Housing finance etc. where the rates of provision differ.

[8] BRPD Circular No. 7, dated June 14, 2012, BRPD Circular No. 9, dated June 18, 2012, BRPD Circular No. 14, dated September 14, 2012, BRPD Circular No. 19, dated December 27, 2012, BRPD Circular No.05 dated May 29, 2013, BRPD Circular No.16 dated November 18, 2014

However, the base for provision shall be further reviewed towards closer convergence with international best practice standards.

### 6.6.7 Eligible Collateral

In the definition of 'Eligible Collateral' as mentioned in the above paragraph the following collateral will be included as eligible collateral in determining base for provision:

- 100% of deposit under lien against the loan
- 100% of the value of government bond/savings certificate under lien
- 100% of the value of guarantee given by Government or Bangladesh Bank
- 100% of the market value of gold or gold ornaments pledged with the bank.
- 50% of the market value of easily marketable commodities kept under control of bank
- Maximum 50% of the market value of land and building mortgaged with the bank
- 50% of the average market value for last 06 months or 50% of the face value, whichever is less, of the shares traded in stock exchange

## 6.7 Rescheduling of Loans[9]

For requesting rescheduling of loans, the banks shall examine the causes as to why the loan has become non-performing. If it is found from such review that the borrower has diverted the funds elsewhere or the borrower is a habitual loan defaulter the bank shall not consider the application for loan rescheduling. Instead, the bank shall take/continue all legal steps for recovery of the loans[10].

At the time of considering loan rescheduling proposal, bank must review the borrower's cash flow statement, balance sheet, income statement and other financial statements, conduct spot inspection to assess the borrower's overall capacity to repay rescheduled liability. If a bank is satisfied after reviewing above mentioned statements that the borrower will be able to repay, the loan may be rescheduled. Otherwise, bank shall take legal steps to realize the loan, make necessary provision and take measures to write-off as the case may be.

**It is mentionable here that BB has issued new master circular in this regard later on[11].**

[9] BRPD Circular No. 01 dated January 13, 2003

[10] BCD Circular No. 18 dated December 11, 1995

[11] BRPD Circular No. 08 dated June 14, 2012, BRPD Circular No. 8, dated June 14, 2012 and BRPD Circular No. 15, dated September 23, 2012, BRPD Circular No. 6, dated May 29, 2013

### 6.7.1 Rescheduling of Loans: Guidelines

- ✓ The bank must have a policy approved by its Board of Directors in place that defines the circumstances and conditions under which a loan may be rescheduled, consistent with this circular.
- ✓ When a borrower asks for rescheduling of loan, the bank shall meticulously examine the causes as to why the loan has become non-performing.
- ✓ If a borrower while applying for rescheduling, pays the required down payment in cash at a time, the bank must address the application within 03 (three) months upon receipt.
- ✓ Banks while considering loan rescheduling, must consider overall repayment capability of the borrower considering the borrower's liability position with other banks and financial institutions.
- ✓ Banks shall review the borrower's cash flow statement, audited balance sheet, income statement and other financial statements in order to ensure whether the borrower would be able to repay the rescheduled installments/existing liability or not.
- ✓ If required, bank officers shall conduct spot inspections of the borrower's company/business place
- ✓ If a bank is satisfied after due diligence as mentioned above that the borrower will be able to repay, the loan may be rescheduled. otherwise, bank shall take all legal steps to realize the loan and make necessary provision.
- ✓ Rescheduling of any loan must be justified in written statement by the bank's Credit Committee. The statement must give reasons why the rescheduling is beneficial to the long run profitability and capital adequacy of the bank, including the factors that cause the Credit Committee to believe that the loan will ultimately be repaid in full. The statement must also explain the impact of this rescheduling on the bank’s liquidity position and the needs of other customers.

## 6.8 Loan Write Off[12]

Writing off bad loans having adequate provision is an internationally accepted normal phenomenon in the banking business. Owing to the reluctance of banks in Bangladesh in following this system, their balance sheets were becoming unnecessarily and artificially inflated. In order to avoid possible legal complications in retaining the claims of the banks over the loans written off ‘section 28 ka’ has been incorporated in 2001 to the Bank Company Act, 1991. In this context the following policies for writing off loans have been issued for compliance by banks:

- Banks may, at any time, write off loans classified as bad/loss. Those loans which have been classified as bad/loss for the last five years and for which 100% provisions have been kept should be written off without delay. After issuance of this circular the process of writing off all other loans classified as bad/loss should be started immediately. Under the process the oldest bad/loss classified loans should be considered first for writing off.
- Banks may write off loans by debit to their current year's income account where making 100% provision is not found adequate for writing off such loans.
- All out efforts should be continued for realizing written off loans. Cases must be filed in the court of law before writing off any loan for which no legal action has been initiated earlier.
- A separate "Debt Collection Unit" should be set up in the bank for recovery of written off loans.
- In order to accelerate the settlement of law suits filed against the written off loans or to realize the receivable written off loans, any agency outside the bank may be engaged.
- A separate ledger must be maintained for written off loans and in the Annual Report/Balance Sheet of banks there must be a separate "notes to the accounts" containing amount of cumulative and current year's loan written off.

[12] BRPD Circular No. 02 dated January 13, 2003, BRPD Circular No.13 dated November 07, 2013

## 6.9 Credit Recovery

Credit is given by a bank to a borrower with an expectation that the repayment terms and conditions will be met by the counterparty. But, a loan becomes irregular when the borrower fails to repay the loan within the stipulated period. A non-performing loan is one which remains overdue for such a period or more as defined by the country's regulatory body excepting some special cases. Non-performing loan mainly include three categories of loan-sub-standard, doubtful and bad/loss, all of which are calculated on the basis of uniform criteria prescribed by Bangladesh Bank.

**Measures of Credit Recovery**

Banks usually pursue the following steps for recovering credit:

- Non-Legal Measure
- Legal Measure

### 6.9.1 Non-Legal Measure

Since recovery through court case is very expensive, time consuming and a cumbersome process, it is always preferable to settle the cases amicably instead of initiating litigation process. Therefore, bankers should adopt some non-legal measures to persuade the borrowers as well as to put pressure on them to reach at an amicable settlement. Conceptually, settlement of bad loan by negotiating with the borrower before filing suit or through outside court settlement procedure even after taking legal action is a better approach to ensure recovery of loan. All the attempts or measures taken by bank to recover non-performing loan other than settlement through the verdict of the court may be termed as non-legal measures for loan recovery. These include debt for equity swap, debt restructuring, corporate structuring, interactive 'win-win' interest-based negotiation, motivating recovery staffs through objective key performance indicators, detecting problems in early stage, loan rescheduling, persuasion and/or creating pressure through relatives, guarantors, business associates, appointing external recovery agents, etc. Various potential non-legal measures for recovery of bad loan are discussed below.

- Communication
- Persuasion
- Motivating Credit Collection Staff
- Recovery Campaign

- Alternative Dispute Resolution (ADR)
- Appointment of Recovery Agent
- Debt Restructuring
- Corporate Restructuring of the Borrower's Business
- Preparation and Circulation of List of Defaulters
- Waiver of Interest
- Rescheduling With/ Without Interest Waiving
- Write-off

**Communication:** The most successful approach to loan recovery is keeping the borrower in touch arranging meeting of the borrowers at a regular interval; making frequent telephone calls, issuing letters and visiting the business center and residence of the borrower. The personal visit might be done by the branch, regional office and head office personnel based on the complexity of the situation. The bank may think of both the formal and informal visit to borrower's business premises and residence. The communication should be aimed at an integrative 'win-win' interest-based negotiation.

**Persuasion**: The borrowers might be persuaded to repay the loan providing him/her counseling on the positive and negative aspects of non-repayment from legal and ethical point of view; offering some kind of incentives to the borrowers including rescheduling of loan, waiver of interest, etc. for timely payment of installment. Some sort of relief will be offered only when the borrower is sincere and comes forward for instant adjustment of the outstanding liabilities.

Simultaneously bank can put *pressure* on the borrower through family members, relatives, guarantors, business associates, trade associations, employer in case of a salaried person, and local influential persons. Bank can initiate dialogue/negotiation with the borrower, guarantor for amicable settlement.

If friendly meeting, notice, first reminder letter, second reminder letter, personal visit asking for payment do not work, a third and final notice asking for full adjustment as well as informing the borrower that if the loan is not adjusted within the given time, the loan file shall be transferred to the legal department/lawyer of the bank for filing suit. Besides all these, the bank will continue to upkeep constant pressure on the borrower by meeting with and issuing notice to the family members, relatives, guarantors, business associates, trade associations, employer in case of a salaried person a local influential person, etc. In the event borrower is found reluctant, immediate steps should be taken for encashment of securities held and filing of suit accordingly. Even after filing suit, bank can continue dialogue/negotiation with the borrower/guarantor for amicable settlement and such settlement can be informed to the court as per section 38 and 45 of Money Loan Court.

**Motivating Credit Collection Staff**: In most of the cases it is found that the bank employees are ignorant about the effective recovery measures and/ or hesitant in loan recovery. The bank employees can be motivated to sincerely work for loan recovery by providing appropriate training, authority, incentives in the form of cash, kind, increments, promotion, appreciation letter, etc. through objective Key Performance Indicators.

**Recovery Campaign:** The recovery campaign is a formal meeting arranged by collecting bank branch where the borrowers, local representatives and reputed persons, local government officials, officer-in-charge of local police station are invited in advance. The senior bank staffs of head office and regional office can also be there at that time. This sort of campaign is usually done during the harvesting season in case of agricultural credit, and other forms of business having seasonality such as brick field, trading business highly affected by different festivals and the like.

**Alternative Dispute Resolution (ADR)**

The traditional method of resolving legal disputes through conventional litigation procedure turns out to be very expensive, too slow, and too cumbersome for many civil lawsuits. This concern led to the growing use of ways other than litigation to resolve disputes. These other methods are commonly known collectively as Alternative Dispute Resolution (ADR). ADR is a procedure for settlement of disputes by means other than litigation; e.g., by arbitration/mediation. Such procedures, which are usually less costly and more expeditious than litigation, are increasingly being used.

Considering the importance of outside court settlement, the government included the provision of ADR first in 2003 in the Money Loan Court Act, 2003. Subsequently the same Act was amended in 2010 with major revisions with regard to ADR procedure. According to the amendment, ADR had been made a mandatory step for settling the default loan. Section 22, 23, 24, 25, 38, 44(A), 45 of MLC covers the legal procedures related to ADR.

### Appointment of Recovery Agent

The handling of nonperforming assets sometimes requires skills that distressed banks lack (Berggren, 1996). Branch employees remain busy in their day-to-day operations and hardly could manage time to be attached with the absconding non-performing borrowers. Different external recovery agencies bear the responsibility of recovery of long-overdue loan. The study found that a number of sample banks appointed Recovery Agents for recovery of stuck-up loan cases. A loan case is transferred to a recovery agent only when the loan remains unadjusted for long period of time instead of repeated persuasion and follow-up by the branch; the borrower is untraceable/absconding/unwilling to settle the account; there is no/inadequate/defective collateral security and disposal of the security seems to be difficult. But, the recovery agents should be monitored. If the loan cannot be recovered instead of all out efforts then the banks shall file bankruptcy suit to declare the borrower bankrupt and adjust the exposure accordingly.

### Debt Restructuring

To restructure an NPL, the bank negotiates with the borrowers with the aim of strengthening the ability of the later to service and eventually to repay the principal. This usually involves redefining the terms of the original contract (may be increasing grace period, loan period, providing additional loan if justified, inter alia). The process may also require some concessions on part of both the lender and the borrower. Successful debt restructuring can benefit both the parties. However, the process should be initiated only if the economic return from the rehabilitation of the asset exceeds that of its liquidation (Woo, 2000).

### Corporate Restructuring of the Borrower's Business

When a borrower defaults the insolvency system generally provides both the lenders and borrowers with the option to initiate either liquidation or rehabilitation procedures. Banks often opt for rehabilitation when the *Restructuring of the Operations* (including company reorganization, downsizing, and lender's representation in the BOD of the borrower and so on) or *Restructuring of Balance Sheet* (including debt-equity swaps) of the borrower will enable the creditors to recover more than they would expect through liquidation. Rehabilitation may also serve a broader social interest, for example, by granting the borrower a second chance as well as protecting the jobs of the employees of the borrower (IMF, 1999). Workout often entails debt-equity swaps or appointing administrator/bank representative in the board. In case of debt-equity swap banks sometimes become substantial shareholders or majority shareholders in the borrowing firms. This new role requires banks to become actively involved in the management of the firms.

**Preparation and Circulation of List of Defaulters**

Preparation and circulation of a list of borrowers contributes a lot in recovering NPL, especially in case of large willful defaulters. It is observed that before the national election many large defaulters apply for rescheduling their long-overdue loan and even, some make full payment to have clean CIB report. Moreover, publishing the loan default news of listed corporate by DSE also have some positive results, as recently observed by BDBL. The Reserve Bank of India has put in place a system for periodical circulation of willful defaulters' list of banks and financial institutions. The RBI also publishes a list of borrowers (with outstanding aggregate rupees one crore and above) against whom banks and financial institutions have filed suits as on 31st March every year. [http://www.cdrindia.org/].

**Waiver of Interest**

In certain circumstances where full recovery of bad loan seems to be impossible, banks may think of waiving certain amount of interest to recover the remaining outstanding. The circumstances, inter alia, may include death or disability of borrower, incurrence of huge loss, inadequate collateral, and inability of borrower as well as guarantor to adjust full loan amount. While considering waiver of interest bank shall examine each case prudently and judiciously and if there are genuine grounds, bank may initiate negotiation with the borrower/guarantor to waive interest to get back its investment. However, bank can waive accrued interest partly or fully but interest credited to P/L account cannot be waived.

**Rescheduling With/ Without Interest Waiving**

Rescheduling is a standard practice to deal with a nonperforming loan. Re-fixing loan convents works better if the original terms and conditions do not match with the actual business condition or if the problem faced by the borrower in repaying the loan proves to be temporary. Regulations with regard to rescheduling have been elaborated in section III of the paper.

**Write Off**

When a loan is written-off, the bank assumes loss equivalent to its book value and removes it from the balance sheet. The bank will normally do so when the prospect of recovery is very low and when the cost of recovery or maintenance of the asset exceeds its value (Woo, 2000).

Writing off an NPL is not an effective measure of loan recovery because by writing off a loan a bank can simply remove it from the balance sheet and cannot ensure recovery unless banks adopt stringent measures for recovery.

### 6.9.2 Effective Non-legal Measures for Loan Recovery

- Creating awareness for timely repayment
- Establishing rewarding banker-customer relationship
- Making and completion of loan sanctioning and disbursement process in presence of all related parties
- Constant persuasion
- Strengthening early alert system in credit operation
- Understanding the actual reasons for default
- Personal as well as group visit to borrowers and guarantor's office & residence
- Creating pressure through family members & relatives
- Creating pressure through influential local persons e.g. trade associations, employer
- Co-opting members from civil society in ADR meeting
- Motivating recovery staff
- Recovery campaign
- Debt restructuring
- Corporate restructuring
- Disclosing list of defaulters in Local newspaper / Union parishad
- Arranging seminar, symposium, against default loan/defaulters

**Summary of Non-Legal Measures for Loan Recovery**

**Box-6.1: How to Improve Effectiveness of Non-Legal Measures**

- Establishing rewarding banker-customer relationship
- Creating awareness for timely repayment
- Completion of loan sanctioning and disbursement process in presence of all related parties
- Constant persuasion
- Strengthening early alert system in credit operation
- Understanding the actual reasons for default
- Personal as well as group visit to borrowers and guarantor's office & residence
- Creating pressure through family members & relatives
- Creating pressure through influential local persons e.g. trade associations, employer
- Co-opting members from civil society in ADR meeting
- Motivating recovery staff

- Recovery campaign
- Debt restructuring
- Corporate restructuring
- Disclosing list of defaulters in Local Newspaper/Union parishad
- Arranging seminar, symposium, against default loan/ defaulters

**Source:** Siddique et al. 2014

**Box-6.2: Measures for Recovery of Write-off Loan**

- Constant persuasion
- Personal visit of concerned official to business as well as residence of the borrower
- Follow up by recovery team by HO/RO/BR
- Incentives for recovery
- Alternative Dispute Resolution (ADR) under MLC
- Social pressure through friends, relatives, professional association, employer, local representatives
- Interest waiver as per recommendation of branch
- Yearly action plan for recovery
- External recovery agent

**Source**: Siddique et al. 2014

**Box-6.3: Steps Taken After a Loan becomes Overdue**

**Steps taken after first installment of a loan becomes overdue**

- Sending SMS
- 1st Reminder letter
- Meeting with the clients
- Understanding the reason of irregularity
- Debt Restructuring / Rescheduling if thought appropriate

**Steps taken after second installment of a loan becomes overdue**

- Follow up over phone/ Verbal and written request for repayment
- 2nd Reminder letter through SMS and letter
- Visit by branch (personal/group)
- Warning about legal action by next 15 days
- Letters to guarantor
- Legal notice by bank lawyer
- Debt Restructuring / Rescheduling if thought appropriate

**Steps taken after third installment of a loan becomes overdue**

- Final reminder through SMS, telephone call and letter
- Legal notice
- Planning for legal proceedings
- Continued effort by the branch/other units
- Letter to guarantor
- Letter to different banks and association
- Debt Restructuring / Rescheduling if thought appropriate

**Source**: Siddique et al. 2014

| Box-6.4: Recovery Measures before Filing Suit in the Court |
|---|
| ▪ Legal notice by the bank lawyer<br>▪ Motivating borrowers before filing<br>▪ Continued Negotiation<br>▪ Final letter to guarantor<br>▪ Transferring the loan account to Special Asset Management/ Recovery Division<br>▪ Monitoring, follow up & personal visit by recovery wing of Special Asset Management/Recovery Division<br>▪ Checking Security documents, charge documents<br>▪ Transfer to legal division with senior management approval (if applicable)<br>▪ Auction notice to sell mortgage property in the national & local newspaper |
| **Source**: Siddique et al. 2014 |

| Box-6.5: Outside Court Settlement (OCS) Process |
|---|
| ▪ Negotiating with and Persuading the borrower, and guarantor<br>▪ Full pledged involvement of recovery team<br>▪ Personal and group visit to borrowers and guarantor's office & residence<br>▪ Creating pressure through family members and relatives<br>▪ Creating pressure through influential local persons e.g. Chamber president, local government representative<br>▪ Alternative Dispute Resolution under Money Loan Court Act<br>▪ Interest waiver in appropriate cases<br>▪ Appointing External Recovery Agent |
| **Source**: Siddique et al. 2014 |

### 6.9.2Legal Measures of Loan Recovery

The magnitude of accumulation of default loan, among other things, depends on the existing legal measures for loan recovery. A strong and effective legal system increases the possibility of recovery of bad loan. Regulatory responses or reforms in our banking sector took definite shape as regards to the credit discipline mainly in 1990s through the enactment of Money Loan Court Act. A number of legal measures along with the Money Loan Court Act are in place that allows the banks to go for legal action against the defaulted borrower. A number of amendments in Money Loan Court Act have also been made at different time periods to make it befitting with the current situation. The laws relating to lenders' recourse that prevails in the banking sector of Bangladesh is undoubtedly rigorous one. Historically, the problem lies rather with the enforcement of laws in timely manner.

It is generally pointed out by the researchers that our judiciary system is cumbersome and time consuming. Insufficient judicial capacity in terms of number of judges relating to inflow of the suit filed in the court is also responsible for the accumulation of unsettled cases in various courts. Taking legal actions to recover loan is expensive, time-consuming and unpleasant; these are the worst ways to recover loan and that's why should be used as the last resort. The legal system allows defaulters to delay lenders' recourse process indefinitely. Our legal system provides for an elaborate system of appeals, references, reviews and revisions, which causes abnormal delays in the legal process.

The Legal measures for loan recovery include the Money Loan Court Act 2003, the Public Demands Recovery Act 1913, the Bankruptcy Act 1997, and the Civil Procedure Code. Among them, the Money Loan Court Act 2003 is the most effective measure.

***The Money Loan Court Act-2003***

In the backdrop of a huge amount of accumulated non-performing loan, special law related to recovery was introduced in Bangladeshi banking sector in 1990. Before that banks had to file cases in Sub-Judge Courts, Commercial Courts, Assistant Judge Courts, and Certificate Cases to the authorized Certificate Officers in upazilla and districts under the Public Demands Recovery Act, 1913 since there were no recovery related special laws. To get rid of innumerable pending suits in the Civil Court, special Court was established under the Money Loan Court Act, 2003 and some privileges were allowed to default borrowers viz. if the defendant deposits an amount equivalent to 10% of the decreed money within 15 days of submission of application, ex-parte decree may be set aside. Aside from that, under section 46 of the Act, if default borrowers of term loan deposit 10%, 15% and 25% of payable amount in the first one year, first two years and first three years respectively after the commencement of the repayment of the loan as per repayment schedule, they get time for one year more. According to the Act, the default borrowers have the privilege of settlement of cases through mediation.

The Section 12 of this Act empowered financial institutions to sell mortgaged property of the defendant to adjust the sale proceeds towards repayment of loan before filing of suits in the Money Loan Court. Banks are required to publish sale notice (Section 33) in a widely circulated national Bengali daily and, in addition to that, in another local paper, if any, if the court deems that to be necessary, giving at least 15 days' time for selling the mortgaged property of the borrower.

Under Section 41 and 42 of the Money Loan Court Act, 2003, appeal and revision against a judgment or decree have been discouraged. If an amount equivalent to 50% of the decreed money is deposited, in cash, with the decree holder financial institution, appeal shall be admitted for action. If 75% of decreed money is deposited, revision application will be accepted. If the judgment debtor, detained in civil prison, repays, in cash, an amount equivalent to 25% of the outstanding amount and executes a bond to the effect that he/she shall repay the rest of the amount within the next 90 days; civil imprisonment under Section 34 of the Act up to 6 months is relaxable. In the circumstances, for fear of losing property or honor in the society the default borrowers in many instances tend to communicate with banks for settlement of suits.

On March 30, 2010 major amendments were made in the Money Loan Court Act of 2003. Sections 12, 22, 28, 30, 32, 33, 50 of Money Loan Court Act (2003) were amended mainly to address the prevailing situation in banking industry towards recovery of bank loan. Section 12(3) of Money Loan Court Act, 2003 was amended deleting the words "Power of Attorney" which provides financial institutions the right to sell the mortgaged property towards adjustment of default loan without having Power of Attorney from the side of borrowers. Section 21 of Money Loan Court Act, 2003 has been abolished. Section 25 of Money Loan Court has been amended which require the approval of Chief Executive Officer or Managing Director of the financial institution for settling of any suit above Tk. 5 crores under Alternate Dispute Settlement. Due to amendment of Section 32 of Money Loan Court Act, 2003 the defendant shall submit security or bond equivalent to 10% of unrealized amount instead of 25% earlier while filing written objection against execution suit. The amendment of Section 33 of Money Loan Court Act, 2003 requires the court to invite tender while executing any decree or order, in case of sale of any property through auction. Every bidder shall submit with the tender as security through bank draft or pay order equivalent to 20% of quoted price if bid amount is up to Tk.10 lakhs, 15% of quoted price if bid amount ranges between Tk.10 lakhs and Tk.50 lakhs and 10% of quoted price if bid amount exceeds Tk. 50 lakhs. New additions have been made in 2010 under Section (33) where under subsection 6(Ka), 6(Kha), and 7(Ka) the decree holder shall automatically get possession of property after six years on written application to the Court by the decree holder.

***The Public Demands Recovery Act 1913***

The recovery of bank dues, particularly in small loan amounts through Sub-Judge Courts, Commercial Courts, and Assistant Judge Courts are so lengthy and costly affair that the banks generally feel discouraged to go to the above courts. *On the other hand, dues of some*

*Government owned banks are treated as public demand, and legal remedies are available for realization of bank dues as well.* The PDR Act, 1913 was published in the gazette on 22$^{nd}$May, 1913. There are 59 sections and 84 rules in this Act, of which sections 1-33 relate to power and functions of the Certificate Officer and the rest 38-59 are procedural. Under the Public Demands Recovery Act, a Certificate obtained is deemed to be the decree of a Civil Court and the execution proceeding may be started against the debtor forthwith.

***Other Legal Actions***

A number of other legal measures are applicable in some cases such as filing criminal cases for breach of trust under 406/420 BPC: for committing criminal breach of trust, unauthorized sale for mortgaged property or assets created out of bank loan, migration to other places without repaying bank dues, fake loan, etc. and through summery procedure suit. A summary suit is a special procedure under the Civil Procedure Code (CPC) whereby the defendant is given a limited time; say one month (as per CPC-37(i) to explain the reasons why he/she should be allowed to defend the case. This suit can be filed for money decree on the strength of only those documents such as Demand Promissory Note (DP note), Bill of Exchange, Cheque, etc., where there is a prima-facie evidence of the defendant's liability. It can be availed in cases where no securities are available to be enforced.

Bankers' grip over the defaulted borrowers has been made strengthened through an amendment in the Money Loan Court Act, 2003 by allowing the banks to dispose the securities held as collateral without resorting to the court. Even with all these amendments and incorporation of new laws, recovery status of non-performing loan still remains at a low level. The above discussion makes us believe that sole dependence on legal measures is not enough for speedy disposal of default loan. Recognizing the difficulty of settling non-performing loan through debt recovery related court, both policy makers and practitioners increasingly feel the necessity of using non-legal measures for using loan recovery. Non-legal measures i.e. ways of recovering bad loan other than resorting to debt related court is expeditious, less expensive and upholds the spirit of banker-customer relationship.

**Legal Process for Filing Suit under Money Loan Court Act**

With a view to helping the banks and financial institutions in recovery of Non-performing loans, the Money Loan Court Act was enacted as early as in 2003 with the objective of speedy disposal of loan cases. In addition, Insolvency Act was also enacted in 1997 as the last instrument in the hands of the lending institutions. This Insolvency Act provided them with the ways to sue the defaulters with a view to getting them declared as insolvents so that they cannot borrow further. In other words, the Act was conceived of as a threat to the defaulters. Consequent upon these two legislations, thousands of cases were filed by the lending institutions to cover the stuck-up advances before the Money Loan Courts set up specially to try loan cases. Some cases were also filed under the Insolvency Act.

Before taking the Legal Measures, the following matter should be considered by the Banker

- Whether personal contact made with the borrower and guarantors
- How many letters written to the borrower
- Whether notices served demanding full adjustment of the account giving a time limit under advice to the controlling offices
- Whether final notices are served on failure of the borrower to respond under intimation to the higher controlling offices.
- Is there any irregularity in sanctioning and disbursement of the credit?
- Whether debit balance confirmation is obtained from the borrower.
- Date of last deposit in the account.
- Is there any possibility of time-bared?
- Before serving legal notice, following are must:
  - ✓ Documents are complete and in order,
  - ✓ Securities are in order and in marketable condition.

**Steps of Filing Suit under Money Loan Court Act, 2003**

**Special Provision and Time Limit in Respect of Disposal of Suits (Section-46):**

(1) Not withstanding anything contained, to the contrary, in the Limitation Act, 1908 (Act no. IX of 1908), if the borrower does not repay-

(a) A minimum 10% in the first one year; or

(b) A minimum 15% in the first two years; or

(c) A minimum 25% in the first three years

of the amount, as will be payable during the period, after the commencement of the repayment of the loan as per repayment schedule according to the contract or terms of the contract signed, the financial institution shall, subject to the provision of sub-section (2), file suit within the next one year thereafter.

(2) If the financial institution reschedules the schedule of loan repayment within the period mentioned in sub-section (1), then, the provision of sub-section (1) shall, accordingly, be effective afresh with necessary changes (*mutatis mutandis*).

(3) In case of the prescribed total period for repayment of loan as per loan repayment schedule mentioned in sub-section (1) being less than 3 (three) years, if the total amount realization within that fixed total period is less than 20%, then, the financial institution shall file suit within one year next thereafter.

(4) If the financial institution reschedules the schedule of loan repayment within the period mentioned in sub-section (3), then, the provision of sub-section (3) shall, accordingly, be effective afresh with necessary changes (*mutatis mutandis*).

**Restriction in Respect of Imposition of Claim (Section-47):**

Suit value will be the principal amount of loan plus a maximum of 200 percent interest thereon. The court will entertain no suit exceeding this amount. (100+200)

**Duties and Responsibilities of the Banker for Recovery of Loans before Filing Suit under MLCA-2003 (Section-12, 33, 46 & 47)**

No case to be filed before sale of securities: Financial institutions are required to file case, if there is power of attorney to this effect, only after selling goods secured by lien, pledge and hypothecation or property under mortgage. If case is filed before that, they are required to sell it as soon as possible under intimation to the court. If they fail to handover the possession of the property to the buyer, on sale, the financial institutions will seek help from the court. The court, if satisfied, will hand over the property to the buyer on behalf of the lending institutions **(Section-12).**

Auction Sale: The MLC, while executing any decree or order, shall, in case of sale of any property, invite at the expense of the plaintiff, sealed tenders giving 15 (fifteen) days' time from the date of publication of the notice, such notice shall be published in at least in one well circulated national Bangla daily and, in addition to that, in another local paper, if any, if the court deems that to be necessary in the interest of justice; and the notice shall also be published by hanging in the notice board of the court and through beating of drums locally **(Section-33).**

Every bidder shall submit with the tender an amount equivalent to 20% for up to 10.00 lac, 15% for more than 10.00 lac but up to 50.00 lac and 10% for exceeding 50.00 lac of the quoted price in the form of bank draft or pay order in favor of the Court, the tender shall be dropped directly in the tender box or sent to the prescribed authority through registered post within the prescribed time; and the bidder shall pay the total price within 30, 60 and 90 days respectively for the amount specified of acceptance of the price and, in case of failure, the court shall forfeit his security money. Provided that, the court may cancel the tender, if the price offered for the property appears to be unusually insufficient or low.

If the security is forfeited, the money thereof, shall be paid to the decree holder, the money shall be adjusted with the decree claim, and then, the court, if the price quoted by the second highest bidder and the security forfeited together, is not less than the price quoted by the highest bidder, shall invite the second highest bidder to auction-purchase the property; and the second highest bidder shall pay the total price within next 10 (ten) days of being so invited and if he fails to do that, his security shall be forfeited and, the money thereof, shall be paid to the decree holder to be adjusted with the decreed claim.

If any property cannot be sold the court shall again invite sealed tenders by publishing notice in the same way and shall follow the procedures in respect of sale and forfeiture mentioned earlier.

If any property cannot be sold in the previous way that property shall vest in the decree holder with rights of possession and enjoyment for as long as the decreed claim shall not be fully realized, and the decree holder may realize the unpaid decreed claim by selling that property as per provisions of sub-sections (1), (2), (3) and (4) of sec.33, and the court shall issue a certificate to that effect.

If any money, in addition the decreed amount, is realized through sale, that additional money shall be refunded to the judgment debtor, and if the money realized through the sale is less than the decreed claim, further execution case shall, subject to the provision of section 28, be maintainable for the residuary amount.

In spite of the above, if the decree holder makes an application to the court, in writing, expressing its intention to get that property with title, the court, without any prejudice to the provisions of sub sections (1), (2), and (3) of section-33, shall refrain from following the provisions of sub-sections (4) and (5) of section-33 and shall issue, as per prayer of the decree holder, a certificate with declaration to the effect that the said property has vested with title in the decree holder and such issued certificate shall deemed as a title deed; and the court shall send a copy of that to the office of the relevant local sub registrar for registration. No duty or registration fee shall be payable in respect of the certificate issued under sub-section 7 of section-33. The said decree execution case shall, subject to the provision of section-28, be finally disposed of, if the rights of possession and enjoyment of the property under sub-section (5) or the title of the property under sub-section (7) of section-33 are vested in the decree holder.

**Judicial Procedure:**

The code of Civil Procedure-1908, if not inconsistent with this act, will also be applicable to money loan cases. The financial institutions will file the plaint giving particulars of the case along with documentary evidence and an affidavit against the defendant principal debtor and third-party mortgagor or third-party guarantor, if any/the affidavit will be treated as substantive evidence.

Similar will be the process of reply by the defendant (section- 6). The contents of the plaint will include among others, the following **(Section-8)**

a) Name, address and workplace of the plaintiff;

b) Name, address, workplace and residence etc. of the defendant;

c) All occurrences related to the claims;

d) Place, date and time when the case originated and

e) Relief sought from the court.

In addition, the plaint will also include a schedule which will contain: amount of loans and advances given to the defendant, interest charged, penal interest, other charges, payment made by the defendant prior to the filing of suit and a comparative position between claims by the plaintiff and payment made by the defendant. A schedule of the securities showing particulars against which loans were sanctioned will also be included in the plaint.

**Serving Summons:**

The summons of the court upon the defendant is required to be returned served within 15 days. If not, summons is required to be polished in the newspapers within next 15 days for which a sample of advertisement copy will be submitted to the court by the plaintiff beforehand **(Section-7).**

**Written Reply by the Defendant:** The defendant will produce himself before the court on the date specified in the summons. He will submit written reply about the claims of the plaintiff along with any documentary evidence he has in his possession or indicate the source of those documents if not in his possession **(Section-9).** No written reply will be acceptable to the court later than 40 days of his producing himself before the court **(Section-10).** However, subject to the expenses (Min. Tk. 2000 and not more than Tk. 5,000) as specified in the Act to be borne by the defendant, the time may be extended by another 20 days by the Court **(Section-10).**

**No Case to be Filed before Sale of Securities:** Financial institutions are required to file case, if there is power of attorney to this effect, only after selling goods secured by lien, pledge and hypothecation or property under mortgage. If case is filed before that, they are required to sell it as soon as possible under intimation to the court. If they fail to handover the possession of the property to the buyer, on sale, financial institutions will seek help from the court. The court, if satisfied, will hand over the property to the buyer on behalf of the lending institutions **(Section-12).**

**Formulation of the Case and Settlement:**

On submission of the written reply by the defendant, the judge on the basis of plaint and written reply will formulate the case after hearing both sides, if present. If there is no merit of the case, the judge will immediately award judgment or order **(Section-13).**

**Adjournment of Hearing:**

Subject to the time limit of settlement of the case given in the Act, hearing will not be, on application by either party adjourned more than once provided that the court, if satisfied, may adjourn proceedings for more than once (Section-14).

**Judgment:**

Judgment will be awarded within 10 days on completion of hearing or written 10 days from the date of hearing verbal argument. The judgment debtor will be directed to pay the decretal amount within 60 days, if more time is not considered **(Section-16).**

**Settlement of the Case:**

A case under this Act is required to be settle within 30 days, if exparte or within 90 days from the date of submission of written statement by the judgment debtor. The court may, however, extend time limit by another 30 days stating the reasons thereof (Section-17).

**Finality of Judgment:**

No question will be entertained by any Court on the judgment, order or decree of the loan court (Section-20).

**Chapter VI, Execution (Section-26 to 39)**

The chapter on execution comprising fourteen sections deals with the issues like: Court for execution, time limit for filing execution case, rules for serving notice, objections against notice, rules regarding auction sale, rules regarding civil imprisonment of debtor, recovery of money from third party and settlement during execution case etc. the important ones are given below:

**Time Limit for Execution Case:**

Execution case is required to be filed within 360 days of the judgment or decree. Time limit will be effective in case of decree to pay in lump sum or in installment, from the date of expiry of such payment dates **(Section-28).**

**Auction Sale:**

Sale will have to be affected through open auction of 15 days' notice Intending bidder will deposit required percentage of the value in draft or pay order to the court The entire money will have to be paid within the specified time of acceptance of bid, failing which the deposited money will be forfeited **(Section-33).**

## 6.10Indicative Questions

1. Describe the significance of timely loan recovery.
2. Define Non-Performing Loan (NPL). What are the consequences of NPL?
3. Discuss the non-legal measures of recovering NPL.
4. What do you mean by Alternative Dispute Resolution (ADR)?
5. Write down a summary on the loan recovery process through the operation of Money Loan Court Act.2003.
6. Describe the legal process for filing suits under Money Loan Court Act.

# Module – G
# Leasing and Hire Purchase

## 7.1 Lease Financing

### 7.1.1 Introduction

Leasing, in general, is viewed as a method of financing for acquisition of capital equipment. Leasing involves a contractual relationship under which the owner (lessor) of an asset or property provides it to a firm or a person (lessee) for the purpose of using it for a specified period of time, usually for an agreed sum of rent.

Leasing, therefore, enables a firm to avail the services of a plant or equipment without making the investment or incurring debt obligation. The firms can use the asset by paying a series of periodic amounts called 'lease payment' or 'lease rentals' to the owner of the asset at the predetermined rates and generally in advance. The payment may be made monthly, quarterly or annually. Often it is no initial deposit or fee. Lease contracts have two parties, namely, lessor and lessee.

Conceptually, leasing may be distinguished from hire purchase and installment purchase. Under hire purchase, the buyer acquires the ownership of goods only after he has paid the total price in an agreed number of installments. Under installment purchase, the ownership in assets passes to the buyer as soon as the first installment is paid. If the buyer fails to pay the installment in accordance with the agreement, the seller can sue the buyer for balance but cannot recover the goods. In case of a lease transaction, however, the lessee (user) acquires only the usage or custody of the property and is not the ownership thereof; ownership vests with the lessor.

### 7.1.2 Objectives of Leasing

Lease financing, as organized in Bangladesh, operates with the following objectives:

(a) to assist the development and promotion of productive enterprises by providing equipment lease financing and related services;
(b) to assist in balancing, modernization, replacement and expansion of existing enterprises;
(c) to extend financial support to small and medium scale enterprises;
(d) to provide finance for various agriculture equipment; and

(e) to activate the capital market by operating as managers to the issue, underwriters, or portfolio managers.

### 7.1.3 Types of Leases

#### 7.1.3.1 Finance Lease

A finance lease is familiar with various names, such as, 'Full Payout Lease', 'Capital Lease', 'Long Term Lease', and 'Net Lease'. It is defined as a lease that transfers the risks and reward incidental to ownership of an asset to the lessee. Under this form of leasing, the lessee selects the equipment, settles the price and other terms of sale and requests the leasing company to buy it. The lessee, then, takes the equipment from the leasing company on lease. He uses the equipment, maintains and insures it and avails of the after sales service directly through and arrangement with the manufacturer or original seller. The lessee also bears the risk of obsolescence. He has to pay the rentals for the entire lease period even through the equipment may become obsolete during the period of lease.

Thus, at the time of its inception, if a lease meets one or more of the following four criteria, then that lease would be classified as finance lease:

- Ownership is transferred at the end of the lease period;
- Lease contains bargain purchase opinion
- Lease is for major part of asset's useful life. The lease term is equal to 75% or more of the estimated economic life of the leased property;
- The present value of maximum lease payments exceeds or at least is substantially equal (90%) to the fair market value of the leased assets.

Under a finance lease, the rate of lease rental in generally fixed on the basis of the amount of lease, the period of lease, periodicity of rental payment, the rate of depreciation, and other tax benefits available. Usually an advance of three- or four-month's rental is taken by the leasing company and is adjusted at the end of the lease period.

#### 7.1.3.2 Operating Lease

When benefit and risk associated with the ownership of the leased assets are not transferred to the lessee, it is treated as operating lease. Operating lease, sometimes called service lease, provides for both financing and maintenance. Ordinarily, these leases require the lessor to maintain and service the leased equipment. The cost of the maintenance is built into the lease payments. The lease payments required under the lease contract are not sufficient to recover the full cost of equipment. However, the lease contract is written for a certain period, considerably less than the expected economic life of the leased equipment and the lessor expects to recover all costs. Under operating lease, a *cancelable clause* is contained which gives the lessee the right to cancel the lease and return the equipment before the expiry of the basic lease agreement.

In addition to these two major forms of leases, recent years have experienced emergence of certain other type of leases. Among these, some important ones are: Leverage lease, Sale and Leaseback leasing, International leasing and In-House leasing

**7.1.3.3 Leverage Leasing**

The leverage lease arrangements are made when very large and capital-intensive assets are to be acquired as nuclear power plants, telecommunication units etc. These agreements are generally made when a single lessor cannot provide the entire purchase price of the assets. In a no.-leveraged lease, the lessor provides 100% of the assets costs form his own funds. However, in leverage leases, the lessor provides only a percentage (generally 20% to 40%) of the necessary capital and yet become the owner of the equipment. The lessor borrows the remainder of the capital. In leverage lease equipment, three parties are involved- the lessor, the lender or loan participator and the lessee.

**7.1.3.4 Sale and Leaseback Leasing**

Under sale and leaseback leasing agreement, a firm sells an asset to another firm, generally a leasing company, which in turn lease back by the previous owner. The asset is sold at market price and seller firm receives the sale price in cash. Through this transaction, the manufacturing firm unlocks its investment in the existing asset by its sale, realizes liquidity but continues to enjoy the use of the asset. The lessee firm, however, contracts to pay lease rentals, which are fixed with reference to the selling price. The sale and leaseback arrangement can be operating lease or a finance lease depending upon the agreement.

**7.1.3.5 International Leasing**

The term “International Leasing” covers three types of activities (i) Cross Border leasing (ii) Overseas subsidiaries and (iii) Import leasing

- ***(i) Cross Border Leasing*: ** Leasing across national frontiers is Cross Border leasing. Cross Border leasing exists where the lessee and lessor are domiciled in different counties. It includes export leasing.
- ***(ii) Overseas Subsidiaries*: ** When a financial institution sets up leasing subsidiaries overseas, each conducting purely domestic business involving lessees in the same country they are called overseas subsidiaries.
- ***(iii) Import Leasing*: ** Import leasing is an arrangement by which a leasing company, a manufacturing company or the government enters into an agreement with a foreign company to acquire sophisticated equipment's on the lease basis. In fact, this activity requires a lot of government support and suitable changes in the import regulations.

### 7.1.3.6 In-House Leasing

When an industrial house promotes a leasing company for the benefit of companies in the same group, that company is known as 'In-House Leasing Company'. They normally float these companies to take advantage of tax benefits and creating an additional source of finance through public issues. The in-house leasing companies enable the industrial house to claim greater amount of expenses as tax-deductible charge than what it can claim otherwise. If the industrial house floats a leasing company, it can charge depreciation on the leases assets in the books of the leasing company and lease rentals in the books of Lessee Company of the group as tax-deductible charges.

### 7.1.4 Potential Areas of Leasing

Leasing Sector in Bangladesh has identified the following sector as the potential areas for financing:

- Capital Machinery
- Heavy construction equipment
- Transport of all kinds both road and marine including commercial vehicles like bus, minibus, pickup van and car etc.
- Information Technology (IT)
- Energy and power
- Air conditioner plants and equipment
- Medical & diagnostic equipment
- Tractors, trailers, power fillers

### 7.1.5 Mode of Operations of a Lease Transaction

The origin and conclusion of a lease contract generally undergoes the following procedure:

a) The lessee chooses the equipment to be purchased and the manufacturer from whom to purchase;
b) The lessee then approaches the lessor, either directly or through a lease-broker;
c) The lease terms are broadly negotiated between the lessor and the lessee and the rates are finalized;
d) The lessor places order for the machinery with the manufacturer chosen by the lessee;
e) The manufacturer supplies the machinery to the lessee;
f) The lease agreement giving detailed terms and conditions is entered into between the lessor and the lessee. *Inter alia,* the lease agreement may provide:
   *i.* The lease period during which the lease is operational;
   *ii.* The timing and amount of lease rentals. The lease rentals may be uniform throughout or may vary according to period. It may thus be higher during the initial years and lower during the subsequent years;
   *iii.* Covenants that during the lease period, the lessee-
      - will pay rentals regularly at periods agreed upon,
      - will keep the equipment in good repair and working condition, and
      - will be entitled to any manufacturer's warranties or after-sales services;
   *iv.* An option to the lessee to renew the lease or to participate in purchase of the machinery when the lessor intends to sell it or as per the terms of the lease;
   *v.* At the end of the lease period, the machinery shall revert to the lessor.

### 7.1.6 Characteristics of an Operating Lease

- Lease is cancelable without substantial penalty.
- Lessor provides maintenance, taxes and insurance
- Contract life is less than the economic life of the asset
- Lessor to receive his investment and return from multiple lessees.
- Lease payments are expensed by the lessee. Since the asset and the lease are not recorded on the balance sheet, no depreciation is taken and the lease payments are shown as an operating expense. Called off balance sheet financing since lessee has use of the asset, can generate income off the asset without recording the asset on the balance sheet,

leading to a misleading ROA calculation. Shows up as operating leverage rather than financial leverage.

- Asset is depreciated by the lessor, sheltering the rental payment. At the end of the lease, the lessor retain title (no purchase option). The lessor can, release the asset, sell the asset, scrap the asset or use the asset himself. Since this is not financing, no truth in lending is required and typical required rates of return are 18% to 28%. Operating leases also cause the lessee to lose the asset at the end of the lease and may require replacement at a higher cost, loss of equity accumulation may affect future financing, loss of residual value, and may lead to inadequate valuation due to habitual leasing.

### 7.1.7 Characteristics of a Financial (or Capital) Lease

1. Asset is fully amortized to one lessee. The lessor plans to recoup his/her investment and required return from one lessee.
2. Not cancelable without substantial penalty, usually acceleration of the remaining lease payments.
3. Lessee is responsible for taxes, maintenance and insurance and Lessor determines liability limits.
4. Contract life approximates the useful economic life of the asset.
5. Lease contains a purchase option at the end of the lease.
6. Lease does not expense the lease payments but rather records the asset on the balance sheet and the lease as a liability. The interest portion of each lease payment is deducted and then the asset is depreciated.

### 7.1.8 Advantages and Disadvantages of Lease to the Lessee

The lessee does not have to pay the cost of asset at the time of signing the contract of leases. Leasing contracts are more flexible so lessees can structure the leasing contracts according to their needs for finance. The lessee can also pass on the risk of obsolescence to the lessor by acquiring those appliances, which have high technological obsolescence. Today, most of us are familiar with leases of houses, apartments, offices, etc.

### 7.1.9 Why is Leasing a preferred mode of Financing?

1. Since leasing generally provides **100% financing**, companies are attracted by the minimum upfront expenses and down payments required by other financing alternatives.

Peripheral out-of pocket expenses like shipping, freight, installation and engineering can be included in the financing.

2. Leasing is a **fixed expense**. With the uncertainty of interest rates and inflation, it is advantageous to lock-in long term expenses -with today's taka. In addition, you have the opportunity to pay for the equipment from the savings realized (i.e., energy efficiency or distributed generation) or income generated (i.e., manufacturing).
3. **Preserves existing lines of credit**. Growing businesses generally have substantial credit needs to finance their development. By diversifying lending relationships, your business maximizes its access to credit and you never ‘put all your eggs in one basket’.
4. **Tax advantages**. Leasing provides substantial tax advantages, in some cases providing 100% write-off of the monthly lease payment.
5. With Energy Efficiency Equipment (as well as other cost savings equipment) *time is literally money*. With leasing, you can prevent the delays in equipment acquisition if you budget 6-12 months in advance and have not allowed for this particular purchase.
6. **Flexible repayment structure.** Some businesses tend to be seasonal in terms of cash flow. With leasing, you may be able to match your lease payments to your cash flows or budget requirements. Skip payments, annual payments and deferred payments are all examples of lease structuring.
7. **Convenient**. Leasing compared to loan might be convenient in terms processing time, documentation required and the like.

### 7.1.10 Factors of Lease Contract / Elements of a Good Lease Document

A lease agreement is a legal and binding contract between the landlord or owner and the tenant. To be binding, it requires that the signing parties be of legal age and competent to enter into an agreement.

**An adequate description of the property:** It might seem obvious, but you cannot over-describe the property being rented. The address, complete with a unit or apartment number may be all that you need. However, it never hurts to give the apartment project name, building number, or any other information that makes this leased property unique from all others.

**Length and time frame of the lease**: It isn't enough to just specify a time frame, as in "six months." Have a beginning date and exact ending date. One more step is also important, and that is a time to vacate. Whether it's midnight or five in the evening, you and the tenant should know precisely when the unit is supposed to be empty of their belongings.

**Renewal terms:** If you give your tenant the ability to renew, it should be stated specifically in the lease. This area might also include statements about the new rental rate for this period. Some property managers place escalation clauses for rent.It is best if you require the tenant to give you written notice of their intent to renew and that they sign a new lease extension document. If you allow them to continue on a month-to-month basis, be clear in this area about the new rules for vacating the property when in this monthly status.

**Security deposits and rent payments:** State laws differ about how much an owner can require in deposits by type; security, first or last month rent, or pet and damage deposits. Your lease document should be clear as to the amounts, how the money will be held, and if interest is earned. Important for deposits is a clear understanding as to how the money will be released at the end of the lease. How will damages be determined and valued? What time period is legal for holding the deposits at lease end? Make sure that the tenant knows the day that rents are due, how to pay them, and what happens and when if they are late in paying.

**Use, occupancy and sublet agreements:** Don't just assume that a residential unit will be used for residential purposes. If you allow a home office, say so, or be clear if you do not. If you do, what about business type, visiting customers or parking? How many people can occupy the unit. State a number, or you may find the local fraternity living there.

If you will allow subletting of the unit, be very clear as to the terms, whether you must approve the person, and how the responsibilities of the original tenant pass to the party subletting. Many landlords specifically rule out this practice, or they require that they approve on a case basis.

**Your rights of entry and inspection:** The longer the lease, the greater the likelihood that you'll want to enter and inspect for property condition. State your rights in the lease, including the notice you will give, usually a legal requirement. When repairs must be made, be clear as to how repair persons will gain entry and who is authorized. Remember that this is your tenant's home, and their privacy is important to them.

**Acceleration of rents:** If legal in your state, you and the tenant should agree in the lease document as to your ability to accelerate the payment of rents if they violate rules, become an annoyance to others, or fail repeatedly to pay rents on time.

**If possible, a waiver of notices:** Again, depending on your state of residence, you may want to include a waiver of notices.This simply states that it is the tenant's responsibility to know when their lease expires, rents are due or any other deadlines or due dates.This waives you of the responsibility of notification in each instance.

**It's All About Clear Language and State Law:** Most real estate investors, owners and landlords get an attorney to draft their lease documents, or purchase a standard form and get their attorney to modify and bless it. This is a good practice, as you do not want to be in violation of your tenant's rights or state laws.

### 7.1.11 Difference between Financial Lease and Operating Lease

An operating lease is treated like renting - payments are considered operational expenses and the asset being leased stays off the balance sheet. In contrast, a capital lease is more like a loan; the asset is treated as being owned by the lessee so it stays on the balance sheet. The accounting treatment for capital and operating leases is different, and can have a significant impact on taxes owed by the business. A capital lease is called a finance lease.

| Point of difference | Financial Lease | Operating Lease |
|---|---|---|
| Lease criteria - Ownership | Ownership of the asset might be transferred to the lessee at the end of the lease term. | Ownership is retained by the lessor during and after the lease term. |
| Lease criteria - Bargain Purchase Option | The lease contains a bargain purchase option to buy the equipment at less than fair market value. | The lease cannot contain a bargain purchase option. |
| Lease criteria - Term | The lease term equals or exceeds 75% of the asset's estimated useful life | The lease term is less than 75 percent of the estimated economic life of the equipment |
| Lease criteria - Present Value | The present value of the lease payments equals or exceeds 90% of the total original cost of the equipment. | The present value of lease payments is less than 90 percent of the equipment's fair market value |
| Risks and Benefits | Transferred to lessee. Lessee pays maintenance, insurance and taxes | Right to use only. Risk and benefits remain with lessor. Lessee pays maintenance costs |

| | | |
|---|---|---|
| Accounting | Lease is considered as asset (leased asset) and liability (lease payments). Payments are shown in Balance sheet | No risk of ownership. Payments are considered as operating expenses and shown in Profit and Loss statement |
| Tax | Lessee is considered to be the owner of the equipment and therefore claims depreciation expense and interest expense | Lessee is considered to be renting the equipment and therefore the lease payment is considered to be a rental expense |

**Difference between Lease and Purchase**

| **Basis** | **Lease** | **Purchase** |
|---|---|---|
| **Ownership** | You don't own the vehicle. You get to use it but must return it at the end of the lease unless you decide to buy it. | You own the vehicle and get to keep it as long as you want it. |
| **Up-front costs** | They typically include the first month's payment, a refundable security deposit, a down payment, taxes, registration and other fees. | They include the cash price or a down payment, taxes, registration and other fees. |
| **Monthly payments** | Lease payments are almost always lower than loan payments because you're paying only for the vehicle's depreciation during the lease term, plus interest charges (called rent charges), taxes, and fees. | Loan payments are usually higher than lease payments because you're paying off the entire purchase price of the vehicle, plus interest and other finance charges, taxes, and fees. |
| **Early termination** | If you end the lease early, early-termination charges can be almost as costly as sticking with the contract. | You can sell or trade in your vehicle at any time. If necessary, money from the sale can be used to pay off any loan balance. |
| **Property return** | You can return the property at lease-end, pay any end-of-lease costs, and walk away. | You'll have to deal with selling or trading in your property when you decide you want a different one. |
| **Future value** | On the plus side, its future value doesn't affect you financially. On the negative side, you don't have any equity in the vehicle. | The vehicle will depreciate but its cash value is yours to use as you like. |
| **Mileage** | Most leases limit the number of miles you may drive, often 12,000 to 15,000 per year. (You can negotiate a higher mileage limit.) You'll have to pay charges for exceeding your limits. | You're free to drive as many miles as you want. (But higher mileage lowers the vehicle's trade-in or resale value.) |
| **Excessive wear and tear** | Most leases hold you responsible. You'll have to pay extra charges for exceeding what is considered normal wear and tear. | You don't have to worry about wear and tear, but it could lower the vehicle's trade-in or resale value. |
| **End of term** | At the end of the lease (typically two to four | At the end of the loan term |

| | | |
|---|---|---|
| | years), you'll have to finance the purchase of the car or lease or buy another. | (typically four to five years), you have no further payments and you have built equity to help pay for your next property. |
| **Customizing** | Because the lessor wants the property returned in sellable condition, any modifications or custom parts you add will need to be removed before you return the property. If there is any residual damage, you'll have to pay to have it fixed. | The property is yours to modify or customize as you like. |

**Difference between Lease and Loan**

| **Lease** | **Loan** |
|---|---|
| Leases require no down payment and finance only the value of the equipment expected to deplete during the term of the lease. The Lessee usually has the option to purchase the equipment at the end of the lease for its remaining value. | Loans usually require the end user to invest a down payment in the equipment. The loan finances the remaining amount. |
| The leased equipment itself is usually all that is needed as collateral. | Loans often require the borrower to pledge other assets as collateral. |
| Leases can be structured so that the end user may claim the entire lease payment as a tax deduction. The equipment write-off is tied to the lease term, which can be shorter than IRS depreciation schedules, resulting in large tax deductions each year. The deduction is also the same every year, which simplifies budgeting. | End users may claim tax deduction for a portion of the loan payment as interest and for depreciation, which is tied to IRS Depreciation schedules. |
| Leased assets are expensed when the lease is an operating lease. Such assets do not appear on the balance sheet, which can improve financial ratios. | Financial Accounting Standards require owned equipment to appear as an asset with a corresponding liability on the balance sheet. |
| More of the cash flow, especially the option to purchase the equipment, occurs later in the lease term when inflation makes dollars cheaper. | A larger portion of the financial obligation is paid in today's more expensive taka. |

## 7.2 Concept and Meaning of Hire Purchase

Hire-purchase is also an alternative to outright purchase of an asset. Similar to lease, under hire-purchase too the hirer (purchaser) pays in installments to the vendor towards cost of the asset interest and other incidentals. Hire purchase is a type of installment credit under which the hire purchaser, called the hirer, agrees to take the goods on hire at a stated rental, which is inclusive of the repayment of principal as well as interest, with an option to purchase. Under this transaction, the hire purchaser acquires the property (goods) immediately on signing the hire purchase agreement but the ownership or title of the same is transferred only when the last installment is paid. The hire purchase as an agreement under which goods are let on hire and under which the hirer has an option to purchase them in accordance with the terms of the agreement and includes an agreement under which:

1) The owner delivers possession of goods thereof to a person on condition that such person pays the agreed amount in periodic installments.
2) The property in the goods is to pass to such person on the payment of the last of such installments, and
3) Such person has a right to terminate the agreement at any time before the property so passes.

Hire purchase should be distinguished from installment sale wherein property passes to the purchaser with the payment of the first installment. But in case of HP (ownership remains with the seller until the last installment is paid) buyer gets ownership after paying the last installment. HP also differs from leasing.

### 7.2.1 Features of Hire Purchase Agreement

The main features of Hire Purchase System are:

1. In the case of hire purchase system, the price of the goods purchased is paid by the purchaser, not in one lump sum, either on the date of purchase or on some future date, but in convenient installments.
2. On the date of purchase, the hire purchaser gets only the possession of the goods, and not the legal ownership of the goods.
3. The legal ownership of the goods is passed on to the hire purchaser only after the last installment is paid.

4. As the legal ownership of the goods is not passed on to the hire purchaser until the last installment is paid, if the hire- purchase fails to pay any of the installments, the hire vendor can take back the goods from the hire purchaser.
5. As the legal ownership of the goods is not passed on to the purchaser until the last installment is paid, the hire purchaser also can return the goods to the hire vendor and terminate the agreement at any time before the last installment is paid.
6. In case of default, the hire vendor need not return to the hire purchaser the installments already paid by the hire purchaser as the installments already paid by him are treated as mere hire charges for the use of goods by the hire purchaser till the date of repossession or return.
7. The total amount payable by the hire purchaser to the hire vendor (i.e., the hire purchase price) is always more than the Cash price of the goods purchased. The difference is the total interest for the various installments.
8. The hirer has the right to terminate the agreement any time before the property passes. That is, he has the option to return the goods in which case he need not pay installments falling due thereafter. However, he cannot recover the sums already paid as such sums legally represent hire charges on the goods in question

### 7.2.2 Advantages of Hire Purchase Financing

- **Improved Standard of Living: People** with small income can buy expensive articles such as car, house, furniture, etc. They can make payment in easy installments and thereby improve their standard of living. The buyer can return the goods if he is not satisfied with their quality or is unable to pay further installments.
- **Encourage to savings:** Hire purchase system encourages people to reduce expenses and save money to pay installments at regular intervals.
- **More Sales:** Hire purchase system helps to widen market for costly goods. People who cannot buy such goods otherwise are tempted to purchase them on installments. The seller can take back the goods if buyer makes default in payment.
- **Advantage to Small Producers:** Small scale units and farmers can buy machinery and equipment and pay installments out of earnings. For example, an unemployed graduate can buy a taxi through hire purchase, earn money from the taxi and pay installments out of such income.

### 7.2.3 Disadvantages of Hire Purchase Financing

- **Extravagance:** Hire purchase system induces middle class people to buy luxury goods which they cannot otherwise afford. They are tempted to pledge their future income. They may not be able to pay installments in time. They suffer heavy loss when the seller takes back the goods on default of payment.
- **Higher Prices:** The buyer has to pay much higher prices than that payable on cash purchase. The seller adds a margin to cover interest and risk. The seller may pass on goods of doubtful quality by offering easy credit terms. The buyer does not get ownership of goods until last installment paid. He cannot sell the goods before final payment.
- **Risk of Bad Debts:** When the buyer fails to pay installments, the seller may suffer loss. He may have to spend money and time to recover goods from the buyer. There is risk of loss of goods lying with the buyer.
- **Large Investment:** The hire purchase seller has to invest considerable funds because payments are received from buyers over a long period of time.

### 7.2.4 Difference Between Lease Financing and Hire Purchase

| **Basis** | **Lease financing** | **Hire purchase** |
|---|---|---|
| 1. Meaning | A lease transaction is a commercial arrangement, whereby an equipment owner or manufacturer conveys to the equipment user the right to use the equipment in return for a rental. | Hire purchase is a type of installment credit under which the hire purchaser agrees to take the goods on hire at a stated rental,<br>which is inclusive of the repayment of principal as well as interest, with an Option to purchase. |
| Option to user | No option is provided to the lessee (user) to purchase the goods. | Option is provided to the Hirer (user). |
| Nature of expenditure | Lease rentals paid by the lessee are entirely revenue expenditure of the lessee. | Only interest element included in the Installments are revenue expenditure by nature. |
| Components | Lease rentals comprise of 2 elements (1) finance charge and (2) capital recovery. | HP installments comprise of 3 elements (1) normal trading profit (2) finance charge and (3) recovery of cost of goods/assets. |

### 7.2.5 Difference between Hire Purchase and Installment Payment System

When the buyer of goods has not enough money to pay for the purchase, he or she may go for either hire purchase or installment purchase and pay money for the purchase in installment; however, before going for it he or she must know the differences between the two. Let's look at the differences between hire purchase and installment purchase –

| **Basis** | **Hire purchase** | **Installment Payment** |
|---|---|---|
| Nature of Contract | It is a hiring goods agreement. | It is an agreement of sale. |
| Ownership | Ownership of goods is transferred after the payment of final installment. | Ownership of the goods passes to the buyer just signing the agreement |
| Right | The buyer cannot sell, destroy or transfer the goods. | The buyer can sell, destroy or mortgage or transfer as his/her wish. |
| Risk | All the risks are borne by the vendor before the payment of final installment. | All the risks are to be borne by the buyer from the date of agreement. |
| Right of Return | The buyer can return the goods before making the final installment. | The buyer cannot return the goods to the seller. |
| Repair and Maintenance | The liability of repair and maintenance lies with the seller provided that the buyer takes the utmost good care. | The buyer is responsible for repair and maintenance. |
| Forfeiture of Installment Paid | In case of default in payment of installment, paid installment will be forfeited and treated as hire charges. | The act of forfeiture cannot be activated. |

### 7.2.6 Legal Aspects of Hire Purchase Agreement

A hire purchase agreement is in many ways similar to a lease agreement, in so far as the terms and conditions are concerned. The important clauses in a hire purchase agreement are:

1. **Nature of Agreement:** Stating the nature, term and commencement of the agreement.
2. **Delivery of Equipment:** The place and time of delivery and the hirer's liability to bear delivery charges.
3. **Location:** The place where the equipment shall be kept during the period of hire.
4. **Inspection:** That the hirer has examined the equipment and is satisfied with it.
5. **Repairs:** The hirer to obtain at his cost, insurance on the equipment and to hand over the insurance policies to the owner.

6. **Alteration:** The hirer not to make any alterations, additions and so on to the equipment, without prior consent of the owner.
7. **Termination:** The events or acts of hirer that would constitute a default eligible to terminate the agreement.
8. **Risk:** of loss and damages to be borne by the hirer.
9. **Registration and fees:** The hirer to comply with the relevant laws, obtain registration and bear all requisite fees.
10. **Indemnity clause:** The clause as per Contract Act, to indemnify the lender.
11. **Stamp duty:** Clause specifying the stamp duty liability to be borne by the hirer.
12. **Schedule:** of equipment forming subject matter of agreement.
13. **Schedule of hire charges:** The agreement is usually accompanied by a promissory note signed by the hirer for the full amount payable under the agreement including the interest and finance charges.
14. **Taxation Aspects:** The taxation aspects of hire purchase transaction can be divided into three parts (a) Income Tax, (b) Sales Tax and (c) Interest Tax.

## 7.3 Indicative Questions

1. "Leasing is a task of NBFIs, so a bank should not get involved in leasing" – Do you agree? Why or why not?
2. Distinguish between lease finance and term loan finance.
3. How is Hire Purchase different from Lease Financing?

***References***

Asian Development Bank (ADB) (2003). Technical Assistance to the People's Republic of Bangladesh for Preparing the Financial Market Governance Program, TAR: BAN 36197, (December).

Banerjee, PrashantaKumar, Farooqi, Quazi Golam Morshed, Pandit, Atul Chandra, Hossain, Md. Mahabbat and Kibriya, Abdul Qayum Mohammad. (2013). "Credit Operations of Banks – 2012", *Banking Review Series 2013*, Paper 1, pp. 01-56, BIBM, Dhaka.

Banerjee, PrashantaKumar, Karmaker, Dhana Ranjan, , Pandit, Atul Chandra, Hossain, Md. Mahabbat and Kibriya, Faisal, Nur Al and Talukder, Akhtar Kamal. (2014). "Credit Operations of Banks – 2013", Review Series 2014, BIBM, Dhaka (upcoming).

Banerjee, Prashanta Kumar, Karmaker, Dhana Ranjan, Pandit, Atul Chandra, Hossain, Md. Mahabbat, Faisal, Nur Al and Talukder, Akhtar Kamal. (2014). "Credit Operations of Banks – 2013", *Banking Review Series 2014*, Paper 1, pp. 01-54, BIBM, Dhaka.

Banerjee, Prashanta Kumar, Karmaker, Dhana Ranjan, Pandit, Atul Chandra, Hossain, Md. Mahabbat, Rahman, Tahmina, Faisal, Nur Al and Azam, Md. Tariqul. (2015). "Credit Operations of Banks – 2014", *Banking Review Series 2015*, upcoming, BIBM, Dhaka.

Bangladesh Bank, "Managing Core Risks in Banking: Credit Risk Management", guidelines issued by Bangladesh Bank.

Bangladesh Bank. (BB) (2003), *Credit Risk Management: Industry Best Practice,* Dhaka.

Bangladesh Bank. (BB) 2005), *Credit Risk Grading Manual,* Dhaka

Banglapedia (2004). National Encyclopedia of Bangladesh, 1st edition, Asiatic Society of Bangladesh, February.

Besssis, J. (1998), *Risk Management in Banking,* England: John Wiley & Sons Ltd., 1998
BIBM Reading Materials

Capital Investment & Financial Decisions – Haim Levy & Marshall Sarnat

Chandra, Prasanna, *Projects-Preparation, Appraisal, Budgeting and Implementation,* Tata McGraw-Hill Co.

Chowdhury, L.R. (2002), *A Textbook on Banker's Advances,* Dhaka: Fair Corporation.

Clifford F. Gray and Erik W. Larson; *Project Management – The Managerial Process* McGraw-Hill International Editions

Comptroller's Handbook (1997), Asset Securitization, published by Comptroller of the Currency Administrator of National Banks, USA (November), http://wallstreetwithoutwalls.com/Articles/WSWWgen_AssetSecuritization.PDF, Date retrieved: December 14, 2005.

Fundamental of Corporate Finance – Stephen A. Ross, Random W. Westerfield& Bradford D. Jordan

Ghosh P.K. and Gupta G.S., Fundamentals of Leasing and Lease Financing, Vision Book Pvt. Ltd., New Delhi 1985.

Greuning, H.V. and Bratanovic, S.B. (1999), *Analyzing Banking Risk, A Framework for Assessing corporate Governance and Financial Risk Management*, Washington, D.C: The World Bank.

IFC (2004). Securitization: Key Legal and Regulatory Issues, IFC Technical Working on Securitization in Russia, Global Financial Markets Department, Securities Markets Unit, http://www.ifc.org/ifcext/eca.nsf/AttachmentsByTitle/Securitization1A%2B9-04/$FILE/Securitization1A%2B9-04.pdf, Date retrieved: December 14, 2005.

IMF (1999) "Orderly and Effective Insolvency Procedures: Key Issues", Legal Department, Washington: International Monetary Fund (IMF).

Islam, M. and M. Siddique (2010), "A Profile of Bank Loan Default in the Private Sector in Bangladesh", Printers Chamber, Chittagong, Bangladesh

Khan, Muhammad Saifuddin , Hassan, Md. Hashibul& Islam, Farhana (2010), "Asset Backed Securitization in Bangladesh: Prospects and Hindrances"

Kothari, Vinod (Undated). Indian Securitization Market: A Scenario Analysis, http://www.vinodkothari.com/india_article_vinodkothari.htm, Date retrieved: December 14, 2005.

R. H. Garrison and E. W. Noreen (2003), "Managerial Accounting", 10th edition

Mukhopadhyay D., "Lease Financing- An Overview", the Management Accountant, May 1995, page 354-356.

Pandey I.M., Financial Management, Vikas Publishing House Pvt. Ltd. 8th Edition.

Peiser, R. and B. Wang (2002), "Non-performing Loan Resolution in China", *Journal of Real Estate Portfolio Management*, Vol.8. No.4

Ray H. Garrison, Eric W. Noreen, and Peter C. Brewer, "Managerial Accounting" Eleventh Edition (2006), Chapter # 9, Page # 376-405.

Siddique, M. M., Islam, M. T. and Ullah, M. S., (2014), "Non-legal Measures for Loan Recovery in the Banking Sector of Bangladesh", *Research Monograph 013*, Bangladesh Institute of Bank Management, Dhaka, Bangladesh.

Siddique, Md. Mohiuddin, Karmaker, Dhana Ranjan, Alamgir, Md. And Hossain, Md. Mahabbat. (2014). "Loan Quality Management in Banks: Problems of Selecting Right Borrowers", *Banking Research Series 2013*, BIBM, Dhaka (upcoming).

Stanley B. Block and Geoffrey A. Hirt, "Foundations of Financial Management" Eleventh Edition (2006), Chapter # 4, Page # 87-101.

Sundaresan, Suresh M. (1997). Fixed Income Markets and Their Derivatives. New York: South Western Publishing.

Weygandt, Jerry J., Paul D. Kimmel and Donald E. Kieso (2010), Accounting Principles, Ninth edition, John Wiley and Sons(Asia) Pvt. Ltd.

Woo, D. (2000), "Two Approaches to Resolving Non-performing Assets During Financial Crises", *IMF Working Paper*. Washington: International Monetary Fund.

www.wikipedia.com