Learning Objectives
After going through the chapter student shall be able to understand

- **Investment Banking**
  1. Main Players
  2. Main Areas
     - Corporate Finance
     - Sales
     - Trading
     - Research
     - Syndicate
  3. Commercial Banking vs. Investment Banking
  4. Details of some functions of an Investment Bank
     - M&A
     - Private Placements
     - Financial Restructurings

- **Credit Rating**
  1. Credit Rating Agencies in India
  2. Credit Rating Process
  3. Uses of Credit Rating
  4. Limitations of Credit Rating
  5. CAMEL Model in Credit Rating
  6. Credit Rating Agencies and the US sub-prime crisis

- **Consumer Finance**
  1. Purpose behind Consumer Finance
  2. Structure of Loans
  3. Basis of Credit Evaluation
8.2 Strategic Financial Management

(4) Some Concepts
(5) Regulation of Consumer Finance

• Factoring
  (1) Types/ Forms of Factoring
  (2) Functions of a Factor
  (3) Forfaiting
  (4) Difference between Forfating and Export Factoring

• Housing Finance
  (1) Regulatory Framework
  (2) Loan Structure and Interest Rates

• Asset Restructuring/Management Company

• Depository Services
  (1) Physical vis-à-vis Dematerialised Share Trading
  (2) Depositories in India
  (3) Pros and Cons of Depository Services
  (4) Functioning of Depository Services

• Debit Cards
  (1) Difference between a Debit Card and a Credit Card
  (2) Benefits of Debit Cards

• Online Share Trading

1. Investment Banking

An investment bank is basically a financial intermediary between the issuer and the investor of securities. Its primary task is to sell securities on behalf of a company and underwrites the issue of new equity shares to raise the necessary capital for the company.

In order to expand their businesses, companies need money. The company does this by selling their securities to investors. Investment bankers help the corporates in this respect. So, we can say that investment bankers are basically financial intermediaries who help their clients in raising capital either by underwriting their shares or bonds or by acting as an agent in the issuance of securities.

Further, it has to be noted that Investment banking isn't a specific function. It is a term used for a range of activities including underwriting, selling and trading securities; providing financial advisory services, such as mergers and acquisition advice; divestitures, private equity syndication, IPO advisory and managing assets.
1.1 The main players in Investment Banking: The biggest investment banks in global scenario include Goldman Sachs, Bank of America Merrill Lynch, Morgan Stanley, Salomon Smith Barney, Donaldson, Lufkin & Jenrette, Credit Suisse, Deutsche Bank, Citi, Barclays Capital, and J.P. Morgan among others.

1.2 Main areas of Investment Banking: Generally, the breakdown of an investment bank includes the following areas:

1.2.1 Corporate Finance: The corporate finance, generally perform two different functions:

(i) Mergers and acquisitions advisory and
(ii) Underwriting.

(i) Mergers and acquisitions advisory: Under this aspect of corporate finance, investment banking help in negotiating and structuring a merger deal between two companies. For instance, if a company wants to buy another company, it may take the help of an investment banker who will assist in finalizing the purchase price by coordinating with the bidders, performing due diligence, structuring the deal, negotiating with the merger target and generally ensuring a smooth transaction.

Moreover, mergers and acquisition advisory includes buy side and sell side advisory. However, sell side advisory holds the key because Investment Banker helps in placing the stocks and bonds in the public platform and sell these to investors. This selling aspect helps the companies to generate funds and consequently assists in expanding the corporate finance division of investment banking.

(ii) Underwriting: Under the underwriting function, underwriters help their client companies in raising the required funds for the company. Whenever, a corporate wants to raise capital, it takes the help of underwriters who purchase the unsubscribed portion not taken by the investors. Underwriting can be done either through negotiations between underwriter and the issuing company (called negotiated underwriting) or by competitive bidding. A negotiated underwriting is a negotiated agreed arrangement between the issuing firm and its investment banker. Most large corporations work with investment bankers with whom they have long-term relationship. In competitive bidding, the firm awards offering to investment banker that bid the highest price.

1.2.2 Sales: Sales is an important part of any investment bank. The main task of the sales force of an Investment bank is to enable high net worth individuals and institutions to take orders from them. They make money through commissions received from their clients. They make buy and sell recommendations. For example, if the share price of ABC Ltd. is on the higher side, the sales guy of the investment bank will recommend buying the shares of that company.

1.2.3 Trading: Trading plays an important part for the investment bankers. Clients order is communicated to the trading people by the sales people. Traders help their client in buying and selling of shares, bonds, currencies etc. It also helps them in executing a trade.
Traders tackle all type of transaction, big or small and provide liquidity to the market. They generally make money by purchasing securities at lower price and selling them at a higher price.

Sales force of an Investment bank and traders also delve into propriety trading. Propriety trading is a form of trading in which the traders trades in stocks, bonds, derivatives in its own account using their own money. They do not touch client’s account. The main advantage of this form of trading is that the traders can take the entire profit from the investment made. Otherwise, in other forms of trading they have to depend upon commission from their clients. The chances of making excess profits in this form of trading are much higher since the traders have the necessary expertise which an average investor doesn’t have.

In case of IPOs and follow-on offers, an investment bank’s sales and trading department keeps the communication channel open with the corporate finance department of the company. Generally, it is the responsibility of the sales and trading department of the investment banks to build books for a particular stock. After that, on the date of offering, they fixed the price of the shares and start selling the new shares to their customers.

1.2.4 Research: Research analysts analyses the stock and bonds of various stocks and recommend whether to buy, hold and sell those securities. The job of research analyst is to review the company and wrote a report on the prospectus of a company and gives a buy and sells rating. Some research analyst focuses on equity while some give its attention to fixed income securities such as bonds. Actually, research activity by itself does not generate a lot of income. The recommendation of research workers influences the buying and selling of securities of a company. Because of this, the sales and trading people earns more fees. So, reputable research analyst are a very important part of an investment banking team as they help them in increasing their business and earn a hefty income.

1.2.5 Syndicate: It provides a vital link between sales persons and corporate finance people. Syndicates also work as a group in case of large or risky issues. A syndicate is a temporary association of investment bankers brought together for the purpose of selling new securities. An important job of the syndicate is to act as an underwriter. There are two types of underwriting syndicates, divided and undivided. In a divided syndicate, every member is obliged to sell a portion of his assigned offerings. While in case of undivided syndicate, every member is obliged to sell the unsold portion of his fixed participation in securities. It doesn’t matter that how many securities have actually been sold by the group.

1.3 Commercial Banking vs. Investment Banking: Inspite of sharing many aspects, commercial banking and investment banking contains some fundamental differences. After a quick overview of commercial banking, we will build up to a full discussion of what investment banking entails.

1.3.1 Commercial Banks: The job of commercial banks is pretty simple. They take deposits from the customers and then lend that deposited amount to consumers. If one wants to borrow money to buy a house, car, or for any of his personal purposes, he will approach a
commercial bank. Also, the companies that borrow from commercial banks range from a small shopkeeper to a large multinational company.

If anyone wants to take loans from banks, they contact them and enter into a legal contract. Generally, a negotiation takes place in which the banks pursue their customers individually to determine the terms of the loans, including the time to maturity and the interest rates to be charged.

1.3.2 Investment Banks: The functioning of investment bank is different from a commercial bank. An investment bank does not lend from its cash reserve of deposits accepted from its customers as does a commercial bank. In fact, an investment bank acts as an intermediary and undertakes the matching of buyers and sellers of stocks and bonds.

However, the main purpose of companies to utilize the services of commercial banks and investment banks are the same. Whenever, the companies need funds, they contact the commercial banks for loan or an investment bank to sell their stocks or bonds. However, the investment banks have to comparatively work harder and spent sufficient time to find investors so that it’s client company can get the required capital.

Investment banks typically sell public securities as opposed to private loan agreements initiated by commercial banks. Technically, for example, securities such as stock of TCS or Mahindra and Mahindra Financial Services AAA bonds, represent a high degree of safety and are traded either on a public exchange or through an approved dealer. The dealer is the investment bank.

The investment bank makes money by charging the client a small percentage of the transaction upon its completion. This is generally called "underwriting discount." However, a commercial bank making a loan actually receives interest on the money lent by it.

Thus the fundamental differences between an investment bank and a commercial bank can be outlined as follows:

<table>
<thead>
<tr>
<th><strong>Investment Banks</strong></th>
<th><strong>Commercial Banks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Investment Banks help their clients in raising capital by acting as an intermediary between the buyers and the sellers of securities</td>
<td>1. Commercial Banks accept deposits from customers and lend money to individuals and corporates</td>
</tr>
<tr>
<td>2. Investment Banks do not take deposits from customers</td>
<td>2. Commercial banks can take deposits from customers.</td>
</tr>
<tr>
<td>3. The Investment Banks do not own the securities and only act as an intermediary for smooth transaction of buying and selling securities.</td>
<td>3. Commercial Banks have the ownership of loans granted to their customers.</td>
</tr>
<tr>
<td>4. Investment Banks earn underwriting commission</td>
<td>4. Commercial banks earn interest on loans granted to their customers.</td>
</tr>
</tbody>
</table>
1.4 Details of Some of the Functions of Investment Banks

1.4.1 Issue of IPO: Companies in need of funds resort to Initial public offering (IPO). This is the phase when securities are issued to the public for the first time. After the initial public offering, securities are listed on the stock exchange and sale and purchase of those listed securities can take place. The task of investment bankers in this regard is to underwrite the public issue by charging some commission.

Further, commercial banks have also developed expertise in underwriting public bond deals. So, commercial banks not only lend money by utilizing depositor's money but also they underwrite bonds through their corporate finance department. So, the commercial banks have directly competed with investment banks for this business of bond underwriting. But, in reality, only a handful of big commercial banks are able to compete in this business with the investment banks that generally have a larger share of the pie.

From the perspective of an investment banker, the IPO process consists of these three major phases: hiring the managers, due diligence, and marketing.

1.4.2 Hiring the Managers: Before going for a public issue, the first task that the company does is to hire a merchant banker for the issue which is also called a manager to the issue. The selection process depends upon the investment banker's general goodwill, expertise as well as the quality of its research coverage in the company's specific industry. The selection also depends on whether the issuer would like to see its securities held more by individuals or by institutional investors. Almost all IPO candidates select two or more investment banks to manage the IPO process.

When there is more than one investment bank, one among them is selected as the lead or book-running manager. The lead manager almost always appears on the left cover of the prospectus, and it plays a major role throughout the transaction. The task of the manager is to make all arrangements with the issuer, make the schedule of the issue and fulfills all the requirements of the due diligence process. He is also responsible for the pricing and distribution of the stock.

1.4.3 Due Diligence and Drafting: Once managers are selected, the second phase of the process begins. For investment bankers on the deal, this phase involves understanding the company's business as well as possible scenarios (called due diligence), and then filing the legal documents as required by the SEBI.

The merchant banker would be closely associated in preparing the new applicant's prospectus and other related listing documents. The Merchant Banker shall conduct a due diligence on the applicant and provide due diligence certificate as per Form A of Schedule VI of the ICDR including additional confirmations as provided in Form H of Schedule VI along with the offer document to the exchange. The other certifications as mentioned in ICDR, Schedule VI will be provided, if applicable. [Source: www.nseindia.com]

1.4.4 Follow-on offering of stock: Sometimes an already listed company issue shares to the public again. This is called a Further Public Offer or follow-on offering. The main reason for a company to go through this offer is that – it is growing rapidly and it needs funds for that.
1.4.5 Issue of Debt: Sometimes, the company instead of choosing equity for their funding requirements chooses public debt.

The reasons for issuing bonds rather than stock are explained as follows:

a) When the stock price of the company is down, a bond issue is a better alternative.

b) The firm does not want to dilute its existing shareholding by issuing more equity.

These are both valid reasons for issuing bonds rather than equity.

Further, in case the economy is not doing well investors generally avoid the share issue and in such cases issuance of bonds may be resorted to satisfy the company’s appetite for funds.

In case of a bond issue, the focus of the prospectus is on highlighting the importance of the company’s stability and steady cash flow. On the other hand, a share issue prospectus will highlight the company’s growth and expansion opportunities.

In case of a debt issue, the importance of a bond’s credit rating cannot be undermined. It is necessary to obtain a good credit rating from a reputed credit rating agency like CRISIL, ICRA, CARE etc. So, better credit rating gives an impression that the bond is safer. In order to encourage investors to receive lower rate of interest, the credit rating of debt issue should be high.

1.5 M&A: M&A advisors come directly under the corporate finance departments of investment banks. As in the case of public offerings, merger and acquisition transactions do not directly involve salespeople, traders or research analysts. Particularly, M&A advisory comes under the domain of M&A specialists and fits into one of either two: seller representation or buyer representation (also called target representation and acquirer representation).

<table>
<thead>
<tr>
<th>Representing the target</th>
<th>Representing the acquirer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell-side representation is used when a company asks an investment bank to help it to sell a division, plant or subsidiary operation. In this respect, the first step is to write a selling memorandum and then contact the future buyers of the client.</td>
<td>Under this approach, the investment bank contacts the parties who wish to purchase. The investment banker also attempts to prepare an offer which can be feasible for all parties and helps to crack the deal.</td>
</tr>
</tbody>
</table>

1.6 Private Placements: A private placement involves selling of debt or equity to few private parties. A private placement is different from a public offer because in case of a private placement, shares are offered to a few people instead of offering it to the public in general. Sometimes, the investment bankers advice their client to go for a private placement first and then apply for the initial public offer. The reason is that the bankers want to accumulate sufficient funds to justify the IPO.

The investment banker’s work involved in a private placement is quite similar to sell-side M&A representation. The bankers attempt to find a buyer by writing the selling memorandum and then contacting potential strategic or financial buyers of the client.
Actually, the task of the investment banker is to convince the private investors to invest in the company and get the deal done. They charge fees for this service which is almost equal as is offered in the case of an IPO.

1.7 Financial Restructurings: When a company is not able to meet its obligations, the chances are that it may go bankrupt. In this situation, the company may either shut down its operations or it can restructure and remain in business.

Financial restructuring involves renegotiating payment terms on debt obligations. It also includes issuing new debt and restructuring payables to vendors. Investment bankers in this respect provide guidance to the companies by recommending sale of assets, issuing convertible stocks and bonds, or it even advises for the sale of the whole company.

The investment bankers who are in the restructuring business generally deal with distressed companies i.e. the companies who are either going for bankruptcy or in the middle of a bankruptcy process. In this regard, the investment bankers are hired to provide a best deal for the company in the form of forgiveness of a large part of the debt. The companies are also advised to restructure its debt in the most prudent manner possible and get out of the bankruptcy process. Moreover, the bankers in the restructuring arena are also legally adept. For example “The Insolvency and Bankruptcy Code” has a huge impact on the bankruptcy process.

As a company involved in a bankruptcy process faces enough cash problems, the investment banks often charge minimal monthly retainers. They hope that the company will revive and they then make a substantial profit. They also make good income in case new securities are issued to pay back the old debt.

Because a firm in bankruptcy already has substantial cash flow problems, investment banks often charge minimal monthly retainers, hoping to cash in on the spread from issuing new securities. Like other public offerings, this can be a highly lucrative and steady business.

2. Credit Rating

Credit Rating means an assessment made from credit-risk evaluation, translated into a current opinion as on a specific date on the quality of a specific debt security issued or on obligation undertaken by an enterprise in terms of the ability and willingness of the obligator to meet principal and interest payments on the rated debt instrument in a timely manner.

Thus Credit Rating is:

(1) An expression of opinion of a rating agency.
(2) The opinion is in regard to a debt instrument.
(3) The opinion is as on a specific date.
(4) The opinion is dependent on risk evaluation.
(5) The opinion depends on the probability of interest and principal obligations being met timely.
Such opinions are relevant to investors due to the increase in the number of issues and in the presence of newer financial products viz. asset backed securities and credit derivatives.

Credit Rating does not in any way linked with:

1. Performance Evaluation of the rated entity unless called for.
2. Investment Recommendation by the rating agency to invest or not in the instrument to be rated.
3. Legal Compliance by the issuer-entity through audit.
4. Opinion on the holding company, subsidiaries or associates of the issuer entity.

It should be noted that rating is a continuous process and as new information come, an earlier rating can be revised.

While the rating is usually instrument specific, certain credit rating agencies like CARE, undertakes credit assessment of borrowers for use by banks and financial institutions.

2.1 Credit Rating Agencies in India: Around 1990, Credit Rating Agencies started to be set up in India.

Among them the most important ones are:

1. Credit Rating Information Services of India Ltd. (CRISIL) – Launched in the pre-reforms era, CRISIL has grown in size and strength over the years to become one of the top five globally rated agencies. It has a tie up with Standard and Poor’s (S & P) of USA holding 10% stake in CRISIL. It has also set up CRIS – RISC a subsidiary for providing information and related services over the internet and runs an online news and information service.
8.10 Strategic Financial Management

2) **Investment Information and Credit Rating Agency (ICRA)** – It began its operations in 1991. Its major shareholders are leading financial institutions and banks. Moody’s Investor Services through their Indian subsidiary, Moody’s Investment Company India (P) Ltd. is the single largest shareholder.

3) **Credit Analysis and Research Ltd. (CARE)** – It was established in 1993. UTI, IDBI and Canara Bank are the major promoters. CARE occupies a pivotal position as a rating entity.

4) **Fitch Ratings India (P) Ltd.** – The Fitch Group, an internationally recognized statistical rating agency has established its base in India through Fitch Rating India (P) Ltd. as a 100% subsidiary of the parent organization. Its credit rating apply to a variety of corporates / issues and is not limited to governments, structured financial arrangements and debt instruments.

5) **SMERA** - SMERA is a division of Acuite Ratings & Research Limited dedicated to providing SME ratings & grading services to MSMEs. Acuite began its operations in year 2005 as SME Rating Agency of India Limited, a joint initiative of Small Industries Development Bank of India (SIDBI), Dun & Bradstreet Information Services India Private Limited (D&B) and leading public and private sector banks in India. Acuite is registered with the Securities and Exchange Board of India (SEBI) as a Credit Rating Agency and is accredited by Reserve Bank of India (RBI) as an External Credit Assessment Institution (ECAI), under BASEL-II norms for undertaking Bank Loan Ratings. [Source: www.smeraratings.in]

6) **Brickwork Ratings** – Brickwork Ratings (BWR), a SEBI registered Credit Rating Agency, has also been accredited by RBI and empanelled by NSIC, offers Bank Loan, NCD, Commercial Paper, MSME ratings and grading services, NABARD has empanelled Brickwork for MFI and NGO grading. BWR is accredited by IREDA and the Ministry of New and Renewable Energy (MNRE), Government of India, to grade companies seeking credit facilities from IREDA, Renewable Energy Service providing Companies (RESCOs) and System Integrators (SIs). [www.brickworkratings.com]

All the six agencies are recognized by SEBI.

2.2 **Credit Rating Process**: The default-risk assessment and quality rating assigned to an issue are primarily determined by three factors:

i) The issuer's ability to pay,

ii) The strength of the security owner's claim on the issue, and

iii) The economic significance of the industry and market place of the issuer.

The steps involved are:

1) **Request from issuer and analysis** – A company approaches a rating agency for rating a specific security. A team of analysts interact with the company’s management and gathers necessary information. Areas covered are: historical performance, competitive position, business risk profile, business strategies, financial policies and short/long term
outlook of performance. Also, factors such as industry in which the issuer operates, its competitors and markets are taken into consideration.

2) Rating Committee – On the basis of information obtained and assessment made the team of analysts present a report to the Rating Committee. The issuer is not allowed to participate in this process as it is an internal evaluation of the rating agency. The nature of credit evaluation depends on the type of information provided by the issuer.

3) Communication to management and appeal – The Rating decision is communicated to the issuer and then supporting the rating is shared with the issuer. If the issuer disagrees, an opportunity of being heard is given to him. Issuers appealing against a rating decision are asked to submit relevant material information. The Rating Committee reviews the decision although such a review may not alter the rating. The issuer may reject a rating and the rating score need not be disclosed to the public.

4) Pronouncement of the rating – If the rating decision is accepted by the issuer, the rating agency makes a public announcement of it.

5) Monitoring of the assigned rating – The rating agencies monitor the on-going performance of the issuer and the economic environment in which it operates. All ratings are placed under constant watch. In cases where no change in rating is required, the rating agencies carry out an annual review with the issuer for updating of the information provided.

6) Rating Watch – Based on the constant scrutiny carried out by the agency it may place a rated instrument on Rating Watch. The rating may change for the better or for the worse. Rating Watch is followed by a full scale review for confirming or changing the original rating. If a corporate which has issued a 5 year 8% debenture merges with another corporate or acquires another corporate, it may lead to the listing of the specified.

7) Rating Coverage – Ratings are not limited to specific instruments. They also include public utilities; financial institutions; transport; infrastructure and energy projects; Special Purpose Vehicles; domestic subsidiaries of foreign entities. Structured ratings are given to MNCs based on guarantees or Letters of Comfort and Standby Letters of Credit issued by the banks. The rating agencies have also launched Corporate Governance Ratings with emphasis on quality of disclosure standards and the extent to which regulatory obligations have been complied with.

8) Rating Scores – A comparative summary of Rating Score used by four rating agencies in India is given below.

<table>
<thead>
<tr>
<th>Sample of Rating Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debutures</td>
</tr>
<tr>
<td>Highest Safety</td>
</tr>
<tr>
<td>High Safety</td>
</tr>
<tr>
<td>Adequate Safety</td>
</tr>
<tr>
<td>Moderate Safety</td>
</tr>
</tbody>
</table>
8.12 Strategic Financial Management

<table>
<thead>
<tr>
<th>Inadequate Safety</th>
<th>BB*</th>
<th>BB*</th>
<th>BB*</th>
<th>BWR BB</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Risk</td>
<td>B*</td>
<td>B*</td>
<td>B*</td>
<td>BWR B</td>
</tr>
<tr>
<td>Substantial Risk</td>
<td>C*</td>
<td>C*</td>
<td>C*</td>
<td>BWR C</td>
</tr>
<tr>
<td>Default</td>
<td>D*</td>
<td>D*</td>
<td>D*</td>
<td>BWR D</td>
</tr>
<tr>
<td>Fixed Deposits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Safety</td>
<td>FAAA</td>
<td>MAAA</td>
<td>A1</td>
<td>BWR FAAA</td>
</tr>
<tr>
<td>High Safety</td>
<td>FAA</td>
<td>MAA</td>
<td>A2</td>
<td>BWR FAA</td>
</tr>
<tr>
<td>Adequate Safety</td>
<td>FA</td>
<td>MA</td>
<td>A3</td>
<td>BWR FA</td>
</tr>
</tbody>
</table>

2.3 Uses of Credit Rating

For users –

(i) Aids in investment decisions.

(ii) Helps in fulfilling regulatory obligations.

(iii) Provides analysts in Mutual Funds to use credit ratings as one of the valuable inputs to their independent evaluation system.

For issuers –

(i) Requirement of meeting regulatory obligations as per SEBI guidelines.

(ii) Recognition given by prospective investors of providing value to the ratings which helps them to raise debt / equity capital.

The rating process gives a viable market driven system which helps individuals to invest in financial instruments which are productive assets.

2.4 Limitations of Credit Rating

1) Rating Changes – Ratings given to instruments can change over a period of time. They have to be kept under rating watch. Downgrading of an instrument may not be timely enough to keep investors educated over such matters.

2) Industry Specific rather than Company Specific – Downgrades are linked to industry rather than company performance. Agencies give importance to macro aspects and not to micro ones; over-react to existing conditions which come from optimistic / pessimistic views arising out of up / down turns.

3) Cost Benefit Analysis – Rating being mandatory, it becomes a must for entities rather than carrying out Cost Benefit Analysis. Rating should be left optional and the corporate should be free to decide that in the event of self rating, nothing has been left out.

4) Conflict of Interest – The rating agency collects fees from the entity it rates leading to a conflict of interest. Rating market being competitive there is a distant possibility of such conflict entering into the rating system.

5) Corporate Governance Issues – Special attention is paid to
(a) Rating agencies getting more of its revenues from a single service or group.
(b) Rating agencies enjoying a dominant market position engaging in aggressive competitive practices by refusing to rate a collateralized / securitized instrument or compelling an issuer to pay for services rendered.
(c) Greater transparency in the rating process viz. in the disclosure of assumptions leading to a specific public rating.

2.5 Camel Model in Credit Rating: CAMEL Stands for Capital, Assets, Management, Earnings and Liquidity. The CAMEL model adopted by the Rating Agencies deserves special attention; it focuses on the following aspects:

(a) **Capital** – Composition of Retained Earnings and External Funds raised; Fixed dividend component for preference shares and fluctuating dividend component for equity shares and adequacy of long term funds adjusted to gearing levels; ability of issuer to raise further borrowings.

(b) **Assets** – Revenue generating capacity of existing / proposed assets, fair values, technological / physical obsolescence, linkage of asset values to turnover, consistency, appropriation of methods of depreciation and adequacy of charge to revenues. Size, ageing and recoverability of monetary assets viz receivables and its linkage with turnover.

(c) **Management** – Extent of involvement of management personnel, team-work, authority, timeliness, effectiveness and appropriateness of decision making along with directing management to achieve corporate goals.

(d) **Earnings** – Absolute levels, trends, stability, adaptability to cyclical fluctuations ability of the entity to service existing and additional debts proposed.

(e) **Liquidity** – Effectiveness of working capital management, corporate policies for stock and creditors, management and the ability of the corporate to meet their commitment in the short run.
These five aspects form the five core bases for estimating credit worthiness of an issuer which leads to the rating of an instrument. Rating agencies determine the pre-dominance of positive / negative aspects under each of these five categories and these are factored in for making the overall rating decision.

2.6 Credit Rating Agencies and the US sub-prime crisis: Credit rating agencies played a very important role at various stages in the subprime crisis. They have been highly criticized for understating the risk involved with new, complex securities that fueled the United States housing bubble, such as mortgage-backed securities (MBS) and collateralized debt obligations (CDO).

An estimated $3.2 trillion in loans were made to homeowners with bad credit and undocumented incomes (e.g., subprime or Alt-A mortgages) between 2002 and 2007. These mortgages could be bundled into MBS and CDO securities that received high ratings and therefore could be sold to global investors. Higher ratings were believed justified by various credit enhancements including over-collateralization (i.e., pledging collateral in excess of debt issued), credit default insurance, and equity investors willing to bear the first losses. The critics acclaim that the rating agencies were the party that performed the alchemy that converted the securities from F-rated to A-rated. The banks could not have done what they did without the complicity of the rating agencies. Without the AAA ratings, demand for these securities would have been considerably less. Bank write downs and losses on these investments totalled $523 billion as of September 2008.

The ratings of these securities were a lucrative business for the rating agencies, accounting for just under half of Moody's total ratings revenue in 2007. Through 2007, ratings companies enjoyed record revenue, profits and share prices. The rating companies earned as much as three times more for grading these complex products than corporate bonds, their traditional business. Rating agencies also competed with each other to rate particular MBS and CDO securities issued by investment banks, which critics argued contributed to lower rating standards.

3. Consumer finance

With globalization of the economy, there was a spurt of employment opportunities resulting in the increase of salaried persons. There was a cascading effect of a steady increase in demand and supply of durable consumer valuables thereby paving the way for consumer credit.

Consumer credit provides short term/medium term loans to finance purchase of goods or services for personal use. There are four important sources of consumer finance viz. manufacturers / sellers/dealers, finance companies, banks, credit card companies. In the past, banks provided finance to manufacturing organizations. The consumers borrowed money from the sellers/dealers directly. Finance companies too entered this arena while credit card entitles with the support from banks started operating with substantial success. Both nationalized and private sector banks have started marketing aggressively for a large slice of the market share in this consumer finance segment. Employers also provide loan facilities to salary earners as a part of welfare scheme for their employees. In big concerns, employees organize themselves
into co-operative credit societies and funds raised by its members through periodical contributions are used as loan assistance at low rate of interest.

3.1 Purpose behind Consumer Finance: Banks provide consumer finance in the form of personal loans for expenditure on education or to meet shortfalls in family budgets aimed at providing liquidity and cash support. This also applies to cash drawl facility extended by credit card companies. Manufacturers/dealers in consumer durables, finance companies along with credit card companies also provide consumer assistance towards the purchase of goods and services.

3.2 Structure of Loans: In order to attract consumers, lenders provide various loan products containing different features. However, there are three important aspects which are common to all consumer loans.

(1) Loan Amount (2) Interest Charges for the borrowed period (3) Loan Amount together with interest to be repaid by the borrower in a given period by installments.

In a hire purchase transaction e.g. car loans the legal ownership is retained with the financier whereas in an installment credit e.g. Refrigerators, TVs, the ownership vests with the buyer subject to unpaid vendor’s lien on such goods. The repayment period varies between 36 and 60 months. The motto followed by the finance companies is to entice the consumer with “Buy now and Pay later” instead of “Save now and Buy later”.

3.3 Basis of Credit Evaluation: While carrying out credit evaluation of a consumer, the finance company gives emphasis on the three C’s of lending viz Capacity, Capital and Character. Capacity and Capital focuses on the ability of the borrower to repay. Character, on the other hand, stresses on the willingness of the borrower to repay by following a prescribed schedule. The finance companies have to look into the underlying factors such as:

(a) Present/Future earnings potential of the individual and the amount of surplus available for repayment
(b) Past track record, social status and reputation of the individual
(c) Existing level of debts, initial contribution/safety margins a credit seeker can provide by means of tangible security so as to protect the interest of the lenders in the form of third party guarantees.

It is to be noted that consumer loans are costlier than business loans.

3.4 Some Concepts

Flat Rate

Under such a scheme finance companies structure their hire purchase loans on a flat rate whereby a quoted flat interest rate is applied to the principal amount for the entire period of the contract and the aggregate of principal and interest thus computed has to be repaid in equated installments in that period. The effective rate IRR computed on the basis of flat rate will be higher than the reducing balance method. Repayments are structured either as payments in advance or payments in arrears.
8.16 Strategic Financial Management

Payment in Arrears

Effective Interest Rate differs depending on the timing of cash payments. Effective Rate under a loan system where installments are payable at the end of each month would be lower than what it would be if the installments are payable at the beginning of each month.

3.5 Regulation of Consumer Finance: Consumer Finance provided to the automobile sector by Non Bank Finance Companies (NBFCs) are governed by RBI’s regulations where registration and maintenance of minimum Net Operating Funds and Capital Adequacy on an ongoing basis are mandatory. For banks engaged in consumer finance, the Banking Regulation Act and RBI Act are required to be adhered to.

Illustration 1

Mr Alok wants to buy a car. The invoice price is ₹ 240,000/- . Mr Alok can pay ₹ 28,375 as down payment. A finance company offers him a hire-purchase deal of repayment in 30 months, the flat rate being 6.497%.

Solution

Computation of Monthly Installments

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Cost</td>
<td>₹ 2,40,000</td>
</tr>
<tr>
<td>Down payment</td>
<td>₹ 28,375</td>
</tr>
<tr>
<td>Finance amount (Cash cost – down payment)</td>
<td>₹ 2,11,625</td>
</tr>
<tr>
<td>Flat rate</td>
<td>6.497%</td>
</tr>
<tr>
<td>Amount of finance charges (6.497% p.a. x 2.5 years) applied on finance amount)</td>
<td>₹ 34,375</td>
</tr>
<tr>
<td>Total amount repayable</td>
<td>₹ 2,46,000</td>
</tr>
<tr>
<td>Duration</td>
<td>30 months</td>
</tr>
<tr>
<td>EMI</td>
<td>₹ 8,200</td>
</tr>
</tbody>
</table>

Computation of Effective Rate

Effective rate is the IRR of cash flows

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial outlay</td>
<td>₹ 2,11,625</td>
</tr>
<tr>
<td>Amount of annuity</td>
<td>₹ 8,200</td>
</tr>
<tr>
<td>Annuity factor for 30 months</td>
<td>25.808</td>
</tr>
</tbody>
</table>

By a reference to annuity tables, we can find that this is 1% per month or closely approximates to 1% for a 30 months period 12% per annum.

Effective rate being charged by finance company is therefore 12% p.a., although the apparent rate is only 6.497%.

Illustration 2

Lenders and Company has come up with a special offer for its customers, for purchase of TVs, Refrigerators, Electronic Equipment and other home appliances. A visit to their show room and discussions with sales persons reveal the following:

- The offer is available for a minimum purchase of items for list price of ₹ 18,000
• The purchase price can be paid in 12 equal monthly installments. The first payment is to be made on the date of purchase and the remaining 11 installments are payable each of the following months, on the same calendar date of purchase.

• If the buyers opt to pay in cash, they can get a steep discount of ₹ 1,173 for each lot of purchases worth ₹ 18,000/-. 
  a. Is there an interest element involved in Zero interest offer?
  b. If yes, what is the rate?
  c. Which offer would you prefer?

Solution

Since Lenders and Co are ready to sell the item, with a discount of ₹ 1,173 for each lot of ₹ 18,000, the cash price for the goods is equal to ₹ 16,827. The implicit rate in the offer is the rate at which present value of all the installments equals the cash price of ₹ 16,827.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash price</td>
<td>₹ 16,827</td>
</tr>
<tr>
<td>Outflow if installment</td>
<td>₹ 18,000</td>
</tr>
<tr>
<td>payments are accepted</td>
<td></td>
</tr>
<tr>
<td>First installment</td>
<td>₹ 1,500</td>
</tr>
<tr>
<td>being paid on day</td>
<td></td>
</tr>
<tr>
<td>Zero</td>
<td></td>
</tr>
<tr>
<td>Balance in 11</td>
<td>₹ 16,500</td>
</tr>
<tr>
<td>installments</td>
<td></td>
</tr>
</tbody>
</table>

IRR at which present value of 12 installments equals ₹ 16,827 is 1.25%.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1,500</th>
<th>1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-11</td>
<td>1,500</td>
<td>10.218</td>
<td>15,327</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16,827</td>
</tr>
</tbody>
</table>

IRR = 1.25 p.m x 12 = 15 % p.a

a. Yes, there is an interest element involved.

b. Interest element involved in the offer is 15% p.a.

c. If the customer can borrow from an alternative source at 15%, he should borrow and buy. Otherwise, he should accept the installment credit.

4. Factoring

This concept has not been fully developed in our country and most of their work is done by companies themselves. All units particularly small or medium size units have to make considerable efforts to realize the sale proceeds without much success creating functional difficulties for such units.

Many a units under small-scale sector have become sick only because of delay/non-realisation of their due’s from large units. Introduction of factoring services will, therefore, prove very beneficial for such units as it will free the units from hassles of collecting receivables to enable them to concentrate on product development and marketing.

4.1 Definition and Mechanism:

Factoring process has been succinctly explained in the following diagram:
The study group appointed by the International Institute for the Unification of Private Law (UNIDROIT), Rome, during 1988, recommended, in general terms, the definition of factoring as under:

"Factoring means an arrangement between a factor and his client which includes at least two of the following services to be provided by the factor:

- Finance
- Maintenance of debt
- Collection of debts
- Protection against credit risk."

However, the above definition applies only to factoring in relation to supply of goods and services: (i) across national boundaries; (ii) to trade or professional debtors; (iii) when notice of assignment has been given to the debtors. Domestic factoring is not yet a well defined concept and it has been left to the discretion of legal framework as well as trade usage and convention of the individual country.

In India factoring is undertaken by different bank subsidiaries like SBI Factors and Commercial Services Ltd. Promoted by SBI and Canara Bank Factors Ltd. promoted jointly by Canara Bank, Andhra Bank and SIDBI.

### 4.2 Types/forms of Factoring:

Depending upon the features built into the factoring arrangement to cater to the varying needs of trade/citizens, there can be different kinds of factoring:

**Recourse and Non-recourse Factoring**

Under a recourse factoring arrangement, the factor has recourse to the client (firm) if the debt purchased/receivable factored turns out to be irrecoverable. In other words, the factor does not assume credit risks associated with the receivables. The factor does not have the right to recourse in the case of non-recourse factoring. The loss arising out of irrecoverable receivables is borne by him, as a compensation for which he charges a higher commission.
**Advance and Maturity factoring**

The factor pays a pre-specified portion, ranging between three-fourths to nine tenths, of the factored receivables in advance, the balance being paid upon collection/on the guaranteed payment date. A drawing limit, as a pre-payment, is made available by the factor to the client as soon as the factored debts are approved/the invoices are accounted for. The client has to pay interest (discount) on the advance/repayment between the date of such payment and the date of actual collection from the customers/or the guaranteed payment date, determined on the basis of the prevailing short-term rate, the financial standing of the client and the volume of the turnover.

In Maturity factoring, the client sells his invoice to the factor and the factor pays the client for such invoices either on the date of maturity or any date after the date of maturity. In this type of factoring, the factor does not pay the client any advance money. For instance, the money payable on an invoice on 31st October, 2018 shall be paid either on 31st October, 2018 or any other date after maturity decided between the client and the factor.

**Full factoring**

This is the most comprehensive form of factoring combining the features of all the factoring services specially those of non-recourse and advance factoring. It is also known as old line factoring.

**Disclosed and undisclosed Factoring**

In disclosed factoring, the name of the factor is disclosed in the invoice by the supplier-manufacturer of the goods asking the buyer to make payment to the factor; the name of the factor is not disclosed in the invoice in undisclosed factoring although the factor maintains the sales ledger of the supplier-manufacturer. The entire realization of the business transaction is done in the name of the supplier company but all control remains with the factor.

**Domestic and export/Cross Border Factoring**

If the three parties involved, namely, customer (buyer), client(seller-supplier) and factor (financial intermediary) are domiciled in the same country then it is known as domestic factoring. There are usually four parties involved to a cross border factoring transaction. They are:

1. Exporter (client)
2. Importer (customer)
3. Export factor
4. Import Factor

It is also known as two-factor system.

### 4.3 Functions of a factor:

The main functions of a factor could be classified into five categories:

- **Maintenance/administration of sales ledger**: The factor maintains the clients’ sales
ledgers. On transacting a sales deal, an invoice is sent to the customer and a copy of the same is sent to the factor. The factor also gives periodic reports to the client.

- **Collection facility:** The factor undertakes to collect the receivables on behalf of the client relieving him of the problems involved in collection, and enables him to concentrate on other important functional areas of the business. It also enables the client to reduce the cost of collection by way of savings in manpower, time and efforts.

- **Financing Trade Debts:** The unique feature of factoring is that a factor purchases the book debts of its clients at a price and the debts are assigned in favour of factor who is usually willing to grant advances to the extend of 80% of the assigned debts.

- **Credit Control and Credit Protection:** Assumptions of credit risk is one of the most important functions of the factor. This service is provided where debts are factored without recourse. The factor in consultation with the client fixes credit limits for approved customers.

- **Advisory Services:** By virtue of their specialized knowledge and experience in finance and credit dealings and access to extensive credit information; factors can provide the following information services to the clients:
  1. Customer’s perception of the clients products, changing in marketing strategies, emerging trends etc.
  2. Audit of the procedures followed for invoicing, delivery and dealing with sales returns.
  3. Introduction to the credit department of a bank/subsidiaries of banks engaged in leasing, hire-purchase, merchant banking.

**Illustration 3**

A Ltd. has annual credit sales of ₹ 219 lakh and its average collection period is 50 days. The past experience indicates that bad debt losses are around 2% of credit sales. The factoring is expected to save ₹ 2 lakh in administration costs and also to eliminate all bad debt losses. The factor has agreed to advance 80% of the receivables at 15% p.a. Compute the net factoring cost if factoring commission is 2%.

**Solution**

Average receivable = (₹ 219 lakh/365) × 50 = ₹ 30 lakh

Factoring Commission = 2% on ₹ 30 lakh = ₹ 0.6 lakh

Amount available for advance = 80% of ₹ 30 lakh – Factoring commission (₹ 0.6 lakh) = ₹ 23.4 lakh.

The factor will actually remit the advance net of interest for 50 days.

The annual rate of interest is 15% and so rate of interest for 50 days = (15/365) × 50 = 2.05%

Interest for 50 days on ₹ 23.4 lakh = 2.05% on ₹ 23.4 lakh = ₹ 0.48 lakh

The advance remitted to client = ₹ 23.4 lakh – ₹ 0.48 lakh = ₹ 22.92 lakh
Factoring cost for 50 days = Factoring commission + Interest
= ₹ 0.6 lakh + ₹ 0.48 lakh = ₹ 1.08 lakh

Factoring cost for year = (₹ 1.08 lakh) x (365/50) = ₹ 7.884 lakh

Net Factoring Cost

<table>
<thead>
<tr>
<th>Particulars</th>
<th>₹ lakh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factoring cost per year</td>
<td>7.884</td>
</tr>
<tr>
<td>Less: Costs saved per year</td>
<td></td>
</tr>
<tr>
<td>Bad Debt = 2% on ₹ 219 lakh</td>
<td>4.38</td>
</tr>
<tr>
<td>Administration cost saved</td>
<td>2.00</td>
</tr>
<tr>
<td>Net Factoring cost per year</td>
<td>1.504</td>
</tr>
<tr>
<td>Advance</td>
<td>22.920</td>
</tr>
<tr>
<td>Net Factoring cost per year (%) = (1.504/22.92) X 100</td>
<td>6.56%</td>
</tr>
</tbody>
</table>

4.4 **Forfaiting:** Forfaiting is a form of financing of receivables pertaining to international trade. It denotes the purchase of trade bills/promissory notes by a bank/financial institution without recourse to the seller. The purchase is in the form of discounting the documents covering the entire risk of nonpayment in collection. All risk and collection problems are fully the responsibility of the purchaser (forfaiter) who pays cash to the seller after discounting the bills/notes.

4.5 **Difference between Forfaiting vs Export Factoring**

(a) A forfaiter discounts the entire value of the note/bill. In a factoring arrangement the extent of financing available is 75-80%.

(b) The forfaiter’s decision to provide financing depends upon the financing standing of the availing bank. On the other hand in a factoring deal the export factor bases his credit decision on the credit standards of the exporter.

(c) Forfaiting is a pure financial agreement while factoring includes ledger administration as well as collection.

(d) Factoring is a short-term financial deal. Forfaiting spreads over 3-5 years.

**Illustration 4**

A Ltd. has a total sales of ₹ 3.2 crores and its average collection period is 90 days. The past experience indicates that bad-debt losses are 1.5% on Sales. The expenditure incurred by the firm in administering its receivable collection efforts are ₹ 5,00,000. A factor is prepared to buy the firm’s receivables by charging 2% Commission. The factor will pay advance on receivables to the firm at an interest rate of 18% p.a. after withholding 10% as reserve.

Calculate the effective cost of factoring to the Firm.
8.22 Strategic Financial Management

Solution

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average level of Receivables</td>
<td>3,20,00,000 × 90/360</td>
</tr>
<tr>
<td>Factoring commission</td>
<td>80,00,000 × 2/100</td>
</tr>
<tr>
<td>Factoring reserve</td>
<td>80,00,000 × 10/100</td>
</tr>
<tr>
<td>Amount available for advance</td>
<td>80,00,000 − (1,60,000 + 8,00,000)</td>
</tr>
<tr>
<td>Factor will deduct his interest @ 18%:-</td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>₹70,40,000 × 18 × 90 / 360 = 3,16,800</td>
</tr>
</tbody>
</table>

:. Advance to be paid = ₹ 70,40,000 − ₹ 3,16,800 = ₹ 67,23,200

<table>
<thead>
<tr>
<th>Annual Cost of Factoring to the Firm:</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factoring commission (₹ 1,60,000 × 360/90)</td>
<td>6,40,000</td>
</tr>
<tr>
<td>Interest charges (₹ 3,16,800 × 360/90)</td>
<td>12,67,200</td>
</tr>
<tr>
<td>Total</td>
<td>19,07,200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm's Savings on taking Factoring Service:</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of credit administration saved</td>
<td>5,00,000</td>
</tr>
<tr>
<td>Cost of Bad Debts (₹ 3,20,00,000 × 1.5/100) avoided</td>
<td>4,80,000</td>
</tr>
<tr>
<td>Total</td>
<td>9,80,000</td>
</tr>
<tr>
<td>Net cost to the Firm (₹ 19,07,200 − ₹ 9,80,000)</td>
<td>9,27,200</td>
</tr>
<tr>
<td>Effective rate of interest to the firm = 9,27,200 × 100 / 67,23,200</td>
<td>13.79%</td>
</tr>
</tbody>
</table>

Note: The number of days in a year has been assumed to be 360 days.

5. Housing Finance

The volume and growth rate across time periods are in housing loans are viewed as one of the important barometers of measuring growth in an economy. Increased activity in housing sector viz. renovation, modernization leads to demand for iron and steel, cement which have a positive effect on various sectors as well.

The demand for Housing Finance comes from:

1) Salary earners and self employed professionals with their basic need of a roof over their head.
2) Non residents having an eye on capital appreciation of the asset or with an eye to their possible resettlement in India for NRIs.

The supply of loans comes from:

(a) LIC, National Housing Bank in the government sector.
b) Private Sector housing companies viz. HDFC, Commercial Banks etc.

c) Non Banking Finance Companies, Nidhis and Chit funds, Co-operative and Credit Societies, employers extending staff loans for housing, beside private money lenders.

The following diagram illustrates the growth trajectory for the housing finance industry in India:

5.1 Regulatory Framework: Commercial Banks fund their loans from public deposits. In a falling interest rate regime, investors lock their funds for short duration in the hope of a hike in rates in future. In contrast, housing loans are for longer periods resulting in maturity mismatch which in turn leads to interest rate risks. Commercial banks have to monitor both these areas regularly to make sure that risks associated with floating rate deposits (shorter maturities) and fixed rate housing loans are minimized.

The RBI has laid down guidelines for commercial banks undertaking gap analysis both for interest rate and maturity mismatches.

5.2 Loan Structure and Interest Rates

1) Tenor – Loan structure is 8 years on an average. A longer repayment period of 10, 15 or 20 years is also available to deserving cases.

2) EMI – Considering convenience of recovery, equated monthly repayment is stipulated by lenders.

3) Interest Rate – Interest rate applicable for the loan varies with the tenor. The longer the period, the higher is the interest rate.

4) Fixed vs. Floating – Under fixed interest rates, the rates remain the same for the entire tenor of the loan. Under floating interest rates, interest rates are periodically revised in line with a reference rate.

5) Security – The tangible asset that emerges by use of finance or an alternative asset of adequate value is taken as security. Besides borrower’s direct liability supporting guarantees from individuals or entities with net worth compatible with loan amount are also stipulated.
6) Low Rates – Interest rates are relatively low because lenders believe that given borrower’s affinity and sentimental value attachment to houses, the risk of default is not high.

Illustration 5

Fixed Interest rates quoted on housing loans by a nationalized bank for three different maturity periods are as follows.

<table>
<thead>
<tr>
<th>Interest Rate</th>
<th>Tenure of Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>3 years</td>
</tr>
<tr>
<td>11%</td>
<td>5 years</td>
</tr>
<tr>
<td>12%</td>
<td>10 years</td>
</tr>
</tbody>
</table>

Compute EMI for a loan of \( \text{₹} \ 72,500 \) for each of the maturities.

Solution

<table>
<thead>
<tr>
<th>Interest rate</th>
<th>10% (3 years)</th>
<th>11% (5 years)</th>
<th>12% (10 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Option I</td>
<td>Option II</td>
<td>Option III</td>
</tr>
<tr>
<td>Annual Interest (I)</td>
<td>10%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Loan Period</td>
<td>3 years</td>
<td>5 years</td>
<td>10 years</td>
</tr>
<tr>
<td>Interest Rate adjusted on one month basis (I/12)</td>
<td>0.833</td>
<td>0.916</td>
<td>1.000</td>
</tr>
<tr>
<td>Loan Amount</td>
<td>( \text{₹} \ 72,500 )</td>
<td>( \text{₹} \ 72,500 )</td>
<td>( \text{₹} \ 72,500 )</td>
</tr>
<tr>
<td>Monthly payments</td>
<td>Annuities</td>
<td>Annuities</td>
<td>Annuities</td>
</tr>
<tr>
<td>PVAF for 36/60/120 months</td>
<td>30.99</td>
<td>45.99</td>
<td>69.70</td>
</tr>
<tr>
<td>Annuity = Loan Amount / PVAF</td>
<td>( \text{₹} \ 2339.46 )</td>
<td>( \text{₹} \ 1576.43 )</td>
<td>( \text{₹} \ 1040.17 )</td>
</tr>
</tbody>
</table>

Illustration 6

Mr. Stanley Joseph has secured from a housing bank, a six year housing loan of \( \text{₹} \ 12,00,000 \). The loan was structured as follows:

- Loan Amount --- \( \text{₹} \ 12,00,000 \)
- Repayment --- Six equated annual installments, payable in arrears.
- Reference Base --- Prime Lending Rate
- Reference Rate --- 9% on the date of loan
- Interest on Loan --- 1 percentage point over reference rate of 9%
- Annual Installment --- \( \text{₹} \ 2,75,530 \)

Two years after the loan was granted, the prime rate moves down to 8% and the effective rate on the loan automatically stood revised to 9%. What action can the bank take?
Solution
Revision in equated Instalments
1) Determination of Unpaid principal
2) Re-Computation of EMI for revised period at revised rate

### Determination of Remaining Principal

<table>
<thead>
<tr>
<th>Year</th>
<th>Opg. Bal (₹)</th>
<th>Interest @10% (₹)</th>
<th>Total (₹)</th>
<th>Repaid (₹)</th>
<th>Clg. Bal (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12,00,000</td>
<td>1,20,000</td>
<td>13,20,000</td>
<td>2,75,530</td>
<td>10,44,470</td>
</tr>
<tr>
<td>2</td>
<td>10,44,470</td>
<td>1,04,447</td>
<td>11,48,917</td>
<td>2,75,530</td>
<td>8,73,387</td>
</tr>
</tbody>
</table>

### Determination of Revised Equated Monthly Instalments

- New Amount: ₹ 8,73,387
- New Period: 4 years
- New Rate (8% + 1%): 9%
- PVAF: 3.240

Installment = $\frac{8,73,387}{3.240} = ₹ 2,69,564$

Bank shall revise instalment from ₹ 2,75,530 to ₹ 2,69,564.

Illustration 7

You have a housing loan with one of India’s top housing finance companies. The amount outstanding is ₹ 1,89,540. You have now paid an installment. Your next installment falls due a year later. There are five more installments to go, each being ₹ 50,000. Another housing finance company has offered to take over this loan on a seven year repayment basis. You will be required to pay ₹ 36,408 p.a. with the first installment falling a year later. The processing fee is 3% of amount taken over. For swapping you will have to pay ₹ 12,000 to the first company. Should you swap the loan?

Solution

Present Interest Rate

For a loan of ₹ 1,89,540 annuity being ₹ 50,000, PVAF = 3.791 (₹ 1,89,540 / ₹ 50,000). From PVAF table for 5 years, this corresponds to 10%.

New Interest Rate

For a similar loan, annuity being ₹ 36,408, PVAF = 5.206 (₹ 1,89,540 / ₹ 36,408). From PVAF table for 7 years, this corresponds to 8%.

Interest Rate is prima facie beneficial.

Additional Charges

(i) Swap Charges: ₹ 12,000
(ii) Processing fee 3% on loan amount (3/100 × ₹ 1,89,540): ₹ 5,686
Considering these two factors, IRR = 10.947%

Interest rate on existing loan is 10% while proposed loan is 10.947%. Proposed loan is more expensive. Do not swap.

6. Asset Restructuring/Management Company

**Asset Management Companies** are those companies which manage the Mutual Funds in accordance with an approved mutual fund scheme. Mutual funds raise money by selling investment units of the fund to the public; money received from the sale of investment units is invested in securities or other assets or used to seek a return by any other means. A mutual fund is an investment vehicle suitable for retail investors who have a limited amount of money, lack of experience, knowledge, skill, or time.

Mutual funds are trusts which pool recourses from large number of investors through issue of units for investments in the capital market instruments like shares, debentures and bonds and money market instruments like commercial papers, certificate of deposits and treasury bonds. The income earned through these investments and the capital appreciation realized are shared by the unit holders in proportion to the number of units owned by them.

The management company shall manage the fund strictly in accordance with the policy and objectives of the fund as specified in the mutual fund proposal and prospectus. The fund shall invest in types of securities or assets, having diversification and investment limits as specified by law.

Any person authorized by the management company can make investment decisions according to the investment policy indicated in the mutual fund scheme. A person assigned by the management company can sell investment units of the mutual fund to the public. The person must be approved and meet the qualifications as specified by the authorities, and shall perform his or her duties as prescribed in sales practices, such as recommending a fund that is suitable for the customer’s investment objectives.

**Asset Reconstruction** means to manage and recover Non Performing Assets (NPA’s) purchased from the banks. The job is to bail out banks from the pile of bad loans in which it is sitting. So, here comes the Asset Reconstruction Companies (ARC’s). Their job is to clear the bad assets (NPA’s) from the books of companies. For example, it can handle some of the cases of home loan defaults and pursue the defaulters to pay the sum due. If they do not respond then ARC’s may start foreclosing and selling the properties to extract cash from the defaulted loan amount. They specialize in such activity and can handle them more efficiently because they have the required manpower, experience and support network to do so. Now, whether ARC’s always make profits. Not always. They purchase bad loans from the banks and then they take steps to recover that money. If they able to recover the money, they make a profit, otherwise they lose money.

**How ARC’s purchase assets?**

The Asset Reconstruction Companies purchase assets in the following manner and the whole process is closely monitored by the banking regulator:
(i) **Raising Funds** - Asset Reconstruction Companies are allowed to raise funds from Qualified Institutional Buyers only in order to make payment to buy discounted debts from banks. They raise fund through the issue of security receipts to QIB’s. The security receipt gives the QIB a right, title or interest in the financial asset that is brought by the ARC. ARC’s also issues debt instruments or even sells equity to raise funds. Further, they have to take a special precaution that retail investors are excluded from it. The reason is that ARC’s are highly risky and only QIB’s are able to withstand such risk in case of a loss.

(ii) **Partnership Method** – Many times, ARC’s do not directly buy debts from the banks. They remain on the banks books. And, the bank hires the ARC to do the debt recovery process. Whatever revenue generated is divided between banks and ARC in a predetermined manner.

7. **Depository Services**

The term ‘Depository’ means a place where something is deposited for safe keeping; a bank in which funds or securities are deposited by others under the terms of specific depository agreement. Depository means one who receives a deposit of money, securities, instruments or other property, a person to whom something is entrusted, a trustee, a person or group entrusted with the preservation or safe keeping of something.

The depository is an organization where the securities of a shareholder are held in the form of electronic accounts, in the same way as a bank holds money. The depository holds electronic custody of securities and also arranges for transfer of ownership of securities on the settlement dates. This system is known as ‘scripless trading system’. Any body eligible to provide depository services must register with SEBI.

A depository is an organization which holds the securities of the investors in the form of electronic book entries in the same way a bank holds money. A depository transfers securities without physically handling securities, the way a bank transfers funds without actually handling money.

**7.1 Depository System:** Depository system is concerned with conversion of securities from physical to electronic form, settlement of trades in electronic segment, electronic transfer of ownership of shares and electronic custody of securities. All securities in the depositories are identical in all respects and are thus fungible. The ownership and transfer of securities take place by means of book entries, avoiding the risks associated with paper.

Services provided by a Depository are as follows:

- Dematerialisation (usually known as demat) is converting physical certificates to electronic form
- Rematerialisation, known as remat, is reverse of demat, i.e. getting physical certificates from the electronic securities
- Transfer of securities, change of beneficial ownership
- Settlement of trades done on exchange connected to the Depository
7.2 Physical vis-à-vis Dematerialised Share Trading

<table>
<thead>
<tr>
<th>Physical</th>
<th>Dematerialised</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Actual Delivery of Share is to be exchanged</td>
<td>(1) No Actual Delivery of shares is needed</td>
</tr>
<tr>
<td>(2) Open Delivery can be kept</td>
<td>(2) Not possible to keep delivery open</td>
</tr>
<tr>
<td>(3) Processing time is long</td>
<td>(3) Processing time is less</td>
</tr>
<tr>
<td>(4) Stamp Charges @ 0.5% are levied for transfer</td>
<td>(4) No Stamp Charges are required for transfer</td>
</tr>
<tr>
<td>(5) For sales transaction, no charges other than brokerage are levied</td>
<td>(5) Sales transactions are also charged</td>
</tr>
<tr>
<td>(6) For buy transaction, delivery is to be sent to company for Registration</td>
<td>(6) No need to send the document to the company for Registration</td>
</tr>
</tbody>
</table>

7.3 Depositories in India
1. National Securities Depository Limited (NSDL) – NSDL was registered by the SEBI on June 7, 1996 as India's first depository to facilitate trading and settlement of securities in the dematerialized form. The NSDL is promoted by IDBI, UTI and NSE to provide electronic depository facilities for securities traded in the equity and debt markets in the country. NSDL has been setup to cater to the demanding needs of the Indian capital markets. In the first phase of operations NSDL will dematerialize scrips and replace them with electronic entries.

2. Central Depository Service (India) limited (CDSL) – CDSL commenced its operations during February 1999. CDSL was promoted by Stock Exchange, Mumbai in association with Bank of Baroda, Bank of India, State Bank of India and HDFC Bank.

7.4 Pros and Cons of Depository Services - The major benefits accruing to investors and other market players are as follows:
1. Securities are held in a safe and convenient manner
2. Transfer of securities is effected immediately
3. Stamp duty for transfer is eliminated and transaction costs are reduced
4. Paper work is minimized
5. Bad deliveries, fake securities and delays in transfers are eliminated.
6. Routine changes viz. change in address of one person owning securities issued by different companies can be taken care of simultaneously for all securities with little delay.
7. Benefit accruing from issue of bonus shares, consolidation, split or merger is credited without much difficulty.
8. Payment of dividends and interest is expedited by the use of electronic clearing system.
9. Securities held in electronic form can be locked in and frozen from either a sale or purchase for any definite period.
10. Securities held in electronic form can also be pledged for any credit facility. Both the lender (pledge) and the investor- borrower (pledgor) are required to have a depository account. Once the pledgee confirms the request of the investor the depository takes action and the pledge is in place. By a reverse process, the pledge can be released once the pledge confirms receipt of funds.

There is however risks as well which are briefly discussed as below:

(i) **System failure** – Input control, process control and output control being parts of computerized environment apply equally to the dematerialization process. Unforeseen failures, intentional or otherwise, on the part of the individuals entrusted with protecting data integrity, could lead to chaos.

(ii) **Additional record keeping** – In built provisions for rematerialization exist to take care of the needs of individuals who wish to hold securities in physical form. Companies will invariably need to maintain records on a continuous basis for securities held in physical form. Periodical reconciliation between demat segment and physical segment is very much necessary.

(iii) **Cost of Depository Participant (DP)** – For transacting business, investors have to deal not only with brokers but also with depository participant which acts as an additional tier in the series of intermediaries. A one time fee is levied by the depository participant which small investors consider to be an avoidable cost.

(iv) **Human Fraud** – Dematerialization is not a remedy for all ills. Unlawful transfers by individuals against whom insolvency proceedings are pending or transfers by attorney holders with specific or limited powers are possible.

7.5 **Functioning of Depository Services**: To speed up the transfer mechanism of securities from sale, purchase, transmission, SEBI introduced Depository Services also known as Dematerialization of listed securities. It is the process by which certificates held by investors in physical form are converted to an equivalent number of securities in electronic form. The securities are credited to the investor’s account maintained through an intermediary called Depository Participant (DP). Shares/Securities once dematerialized lose their independent identities. Separate numbers are allotted for such dematerialized securities. Once a security has been dematerialized it can be at the option of the investor converted back to physical form. This is known as Rematerialization. Organization holding securities of investors in electronic form and which renders services related to transactions in securities is called a Depository. A depository holds securities in an account, transfers securities from one account holder to another without the investors having to handle these in their physical form. The depository is a safe keeper of securities for and on behalf of the investors.

8. **Debit Cards**

Debit cards are also known as cheque cards. A debit card is a plastic card that provides the cardholder electronic access to his or her bank account(s) at a financial institution. Debit cards look like credit cards or ATM (automated teller machine) cards, but operate like cash or a personal cheque. Debit cards are different from credit cards. While a credit card is to “pay
later,” a debit card is to “pay now.” When one uses a debit card his money is quickly deducted from his cheque or savings account.

Debit cards are accepted at many locations, including grocery stores, retail stores, gasoline stations, and restaurants. One can use his card anywhere; merchants display his card’s brand name or logo. They offer an alternative to carrying a cheque book or cash.

8.1 Difference between A Debit Card and A Credit Card: It’s the difference between “debit” and “credit.” Debit means “subtract.” When one uses a debit card, one is subtracting his money from his own bank account. Debit cards allow him spend only what is in his bank account. It is a quick transaction between the merchant and his personal bank account.

Credit is money made available by a bank or other financial institution, like a loan. The amount the issuer allows one to use is determined by his credit history, income, debts, and ability to pay. One may use the credit with the understanding that he will repay the amount, plus interest if he does not pay in full each month. He will receive a monthly statement detailing his charges and payment requirements.

The basic difference between the two is the fact that a credit card takes the form of a personal loan from the issuing bank to the consumer, while a debit card is more like a cheque, money is directly deducted from a person’s bank account to pay for transaction.

8.2 Benefits of Debit Cards

1. Obtaining a debit card is often easier than obtaining a credit card.

2. Using a debit card instead of writing cheques saves one from showing identification or giving his/her personal information at the time of the transaction.

3. Using a debit card frees him/her from carrying cash or a cheque book.

4. Using a debit card means he/she no longer has to stock up on traveller’s cheques or cash when he travels.

5. Debit cards may be more readily accepted by merchants than cheques, in other states or countries wherever the card brand is accepted.

6. The debit card is a quick, “pay now” product, giving one no grace period.

7. Using a debit card may mean one has less protection than with a credit card purchase for items which are never delivered, are defective, or misrepresented. But, as with credit cards, one may dispute unauthorized charges or other mistakes within 60 days. One should contact the card issuer if a problem cannot be resolved with the merchant.

8. Returning goods or canceling services purchased with a debit card is treated as if the purchase were made with cash or a cheque.

Benefits of credit cards over debit cards

1. With a flexible spending limit, a cardholder can take advantage of the easy loan facility of a credit card, and can use it to purchase items or spend money that he expects in the near future, not just money that he presently has in his account.
Most of the major features of a debit card such as withdrawal of cash from ATMs are available on credit cards as well.

A credit card has a wider acceptance and recognition, especially in online transactions.

A credit card has greater security measures and checks than a debit card.

Credit cards allow for cash back and bonus points schemes that a debit card is not eligible for.

A credit card can be used as a convenient way to check and record your spending.

Since there is a fixed credit limit, a cardholder cannot overstretch his purchases.

9. Online Share Trading

Traditionally stock trading was done through stock brokers personally or through telephones. As number of people trading in stock market increased enormously in last few years, some issues like location constrains, busy phone lines, miss communication etc. started growing in stock broker offices. Then Information technology helped stock brokers to solve those problems by Online Stock Trading method ("Online stock brokers.").

Online stock trading is an internet based stock trading facility where Investor can trade shares through a website without any manual intervention from the broker. It also provides investors with rich, interactive information in real time including market updates, investment research and robust analysis.

Still some people like offline stock trading where the customer calls the broker to enquire about the stock prices. Then the broker asks some personal details to verify his identity. After that customer can order the amount and the price at which he wants to buy a particular stock. The broker places the order on behalf of the customer. Similarly, the customer can also sell the shares in offline mode. And the customer can monitor all these transactions by logging into his account. The main advantage in offline trading is time-saving.

The Securities & Exchange Board of India (SEBI) approved the report on Internet Trading brought out by the SEBI Committee on Internet Based Trading and Services. Internet trading can take place through order routing systems, which will route client orders to exchange trading systems for execution. Thus a client sitting in any part of the country would now be able to trade using the Internet as a medium through brokers’ Internet trading systems.

SEBI-registered brokers can introduce Internet based trading after obtaining permission from respective Stock Exchanges.

Internet Trading at NSE:

NSE became the first exchange to grant approval to its members for providing Internet based trading services. In line with SEBI directives, NSE has issued circulars detailing the requirements and procedures to be complied with by members desirous of providing Internet based trading and services.

Application for permission:

Members desirous of applying to the Exchange for permission for providing Internet-based trading services are required to do so in a requisite format. An application shall be treated as
complete only after a comprehensive and satisfactory demonstration of the software is given to the Exchange.

Members are also required to submit undertakings in addition to the application form. In respect of members who have already submitted an undertaking for CTCL / Internet based trading in the Capital Market segment, such members shall not be required to submit a separate undertaking for CTCL / Internet based trading in the Futures & Options segment.

Minimum qualification for personnel:
The employees working on Internet based trading are required to have a minimum educational qualification of a degree and have certification in the NCFM – Derivatives Module of the Exchange. Members are required to confirm the same and submit copies of the NCFM certificates at the time of submission of the application for Internet based trading.

Member-client agreement:
Members shall execute an agreement with such clients who wish to avail the Internet trading facilities offered by the member, spelling out all obligations and rights, minimum service standards to be maintained by the member etc. as per model agreement which shall be prepared by the Exchange for this purpose.

Procedures for granting permission for Internet based trading:
The Exchange shall grant permission to members for Internet based trading on a case-by-case basis. Members are fully responsible to procure/develop the software including procurement of computer hardware. The Exchange shall help members to establish the computer to computer link; however the members are fully responsible to implement the solution at their end. Members are solely responsible for all the contracts they enter into with any vendor. The Exchange shall not be liable for any loss, damage or other costs arising in any way out of the failure of the system.

On submission of complete application form, undertaking and charges, the Exchange shall provide the technical specifications (message formats/protocols etc) i.e. APIs for the interface with the Exchange's trading system. A user id on the Exchange's test environment shall be provided to members for the purpose of testing their software.

On completion of development of the software, the member is required to test the software on the NSE trading test environment during a pre-specified time so as to enable the Exchange to monitor the same. The test cases for the final testing shall be provided by the Exchange.

On satisfactory completion of testing on the Exchange test environment, the member is required to give comprehensive demonstration of their website providing the Internet based trading service and the Internet trading software to the Exchange. On finding the website / software to be satisfactory and meeting SEBI / Exchange minimum requirements, the Exchange shall grant permission to the member to commence Internet based trading.

Subsequent to being granted permission, all members are permitted to use only a single user id per VSAT for the purpose of Internet trading on the live environment. Additionally, members shall not be permitted to use the Corporate Manager and Branch Manager user ids’ for this purpose.
Testing facility provided by NSE for testing Internet trading software:

The Exchange provides a facility to members for testing their Internet-trading software on the Exchange’s testing environment.

Members can avail of the testing environment of the Exchange only till the Exchange grants permission to the member. Subsequent to the members being granted permission by the Exchange to commence trading on live environment using their Internet trading software, the test user id(s) given to them on the testing environment shall be disabled.

Members wishing to avail of the test facility subsequent to being granted permission to commence trading on live environment shall be permitted to do so, on a case-to-case basis subject to the following:

1. Members are required to apply for the test facility giving broadly the reason for the requiring the test facility, duration for which test facility is required, nature of the changes to the software, new functionalities proposed etc.

2. The member is required to give a comprehensive demonstration of the modified software on completion of testing.

The Exchange shall allot not more than 2 user ids per member on the Exchange test environment. The user ids shall be disabled at the end of the testing period requested by the member.

Internet has made it possible for the people to deal in stocks, execute banking related activities, buy-sell products and so on. A large number of people have started trading online and it has become very popular in a short period of time.

It is against a mere 4% in the year 2004, online trades now accounts for more than 12% of its daily turnover on the National Stock Exchange (NSE). The quality of infrastructure has been developed significantly in the recent past connected by high speed networks, buyers and sellers are gathering in virtual market – places and revolutionizing the way business is conducted.

Advantages of Online Trading

(i) **Time:** Customers can trade online in a real time basis as buying and selling of shares happen with a press of button.

(ii) **Flexibility:** Customers can modify the placed orders according to the market movements.

(iii) **Standardized Procedure:** Customer can easily expect the time when cash or shares to be credited to his account.

(iv) **One stop shop:** Bank statements and transaction statements can be viewed at the click of a button.

(v) **Informed Research:** Customers can directly see the stock analysis provided by the broker.
Disadvantages

(i) **Limited Knowledge**: Sometimes customers don’t have knowledge regarding how to use the online trading portal. And also lack the financial awareness about stock market.

(ii) **Internet Connectivity**: Online trading requires high speed internet connectivity. But many rural and urban areas don’t have this facility today.

(iii) **Time required**: Customers have to spend lots of time seating in front of terminal to monitor stock prices. It’s not suitable for busy professionals.