UNIT 14 RECEIVABLES MANAGEMENT

Structure **Page Nos.**

14.0 INTRODUCTION

In the previous unit, we have seen how firms determine their needs for current assets and manage their holdings in cash and marketable securities. In a typical manufacturing company the debtors to total asset ratio varies from 20 to 25% which is a considerable investment of funds. The effective management of this asset will have a significant effect on the profitability of the company. The receivable (debtors) arise due to credit sales, which is undertaken in order to encourage customers to purchase goods or services. Accounts receivable use funds, and tying up funds in these investments has an associated cost which, must be considered along with the benefits from enhanced sales of goods and services. In this unit we are going to discuss the various issues involved in management decisions of extending credit (i.e., accounts receivable). We shall also discuss the issues pertaining to Non- Performing Assets.

14.1 OBJECTIVES

After going through this unit, you should be able to:

- understand the need for establishing sound credit policy;
- identify the various credit policy variables;
- understand the credit evaluation process;
- describe the techniques of monitoring receivables;
- understand the concept of factoring and;
- explain the issues involved in managing Non- Performing Assets.

14.2 TERMS OF PAYMENT

Terms of payment vary widely in practice. At one end, if the seller has financial resources, s/he may extend liberal credit to the buyers, on the other hand the buyer pays in advance and finances the entire trade cycle. The terms of credit vary for different industries and are dictated by prevailing trade practices. In general, businesses operating in monopoly environment will insist on advance/cash payment whereas business operating in a competitive environment will extend credit to the buyers. The major terms of payment are listed below: Let us discuss them in brief.

Cash Terms

When goods are sold on cash terms, the sales consideration (payment) is received either before goods are sold (advance payment) or when the goods are delivered (cash on delivery) Cash term generally exist under the following conditions:

(a) when goods are made to order

(b) when the buyer is perceived to be less credit worthy

(c) the seller is in strong bargaining position.

Open Account

A credit sale is generally on open account which implies that the seller ships the goods to the buyer and thereafter sends the bill (invoice).

Consignment

Under this type of terms, the goods are merely shipped to the consignee; they are not sold to the consignee. The consignee then sells these goods to the third party. One should note here that the title of the goods is retained by the seller till they are sold by the consignee to the third party. Sales proceeds are remitted by the consignee to the seller.

Negotiable Instruments/Hundi

When the goods are sold on credit either through an open account or through consignment, a formal legal evidence of the buyers obligation is not created. In order to overcome this, a more secure agreement usually in the form of a draft is sought. A draft represents an unconditional order issued by the seller to the buyer asking the buyer to pay on demand (demand draft) or at some future certain date (time draft) the amount specified on the draft. The draft is usually accompanied by the shipping documents that are deliverable to the drawee when he pays or accepts the draft. Time drafts can be discounted with the bank. The draft performs four useful functions:

(a) it creates an evidence of buyer obligation

(b) it helps in reducing the cost of finance

(c) it provides liquidity to the seller

(d) it is a negotiable instrument.

Letter of Credit

Under the documentary bills the seller faces a lot of risk – the risk of non-payment or non-acceptance of goods. This poses a major risk for the seller. This additional security under this method comes from the fact that, the letter of credit is issued by the bank and not by the party to the contract buyer. This instrument guarantees payment to the seller on fulfilment of certain conditions specified therein. The Letter of Credit can be defined as an instrument issued by a bank in favour of the seller (known as beneficiary) whereby the issuing bank undertakes to pay the beneficiary a certain sum against delivery of specific documents within a stated period of time. There are many forms of a letter of credit and the most widely used are as follows:

1) Revocable vs. Irrevocable Letter of Credit
2) Confirmed vs. Unconfirmed Letter of Credit
3) Revolving Letter of Credit

4) Transferable Letter of Credit
5) Back to Back Letters of Credit
6) With Recourse vs. Without Recourse Letter of Credit.

14.3 CREDIT POLICY VARIABLES

Each company should establish its own credit policy depending upon the ground situation and the environment in which it is operating. The main objective of the credit policy is to stimulate sales as well as control expenses and bad debts associated with granting credit. Let us discuss the main components of a credit policy.

1) credit period to be allowed to general customers
2) credit period to be allowed to special customers and the criteria for defining special customer to be predefined
3) credit rating system
4) cash discount policy or discount policy for pre-payment by debtors
5) collection policy
6) accounting system and management information system (MIS) for scrutiny and efficient management of debtors
7) policy for dealing with bad and doubtful debts
8) credit insurance cover
9) proper documentation of credit sales.

If we regroup the above components they can be classified under the four dimensions of a firm's credit policy which are as follows:

a) credit standards
b) credit period
c) cash discount
d) collection effort.

Deciding on the credit policy involves a trade off between sales and expenses/losses. Decreasing credit standards would increase sales but at the same time would lead to increase in bad debt losses. The same is true for other variables of credit policy also. Now let us examine the effect of each of these variables on the net profit on the firm.

Credit Standards

This variable deals with the granting of credit. On one extreme all the customers are granted credit and on the other extreme none of them are granted credit irrespective of their credit rating, but in today's competitive environment this is not possible. In general liberal credit standards lead to increased sales accompanied by higher incidence of bad debts, tying of funds in accounts receivable and increased cost of credit collection. Stiff or tight credit standards lead to decreased sales, lower incidence of bad debts, decreased investment in accounts receivable and decreased collection cost.

The quantitative effect of relaxing the credit standards on profit can be estimated by the equation 2.1

$$\Delta NP = [\Delta S(1-V) - \Delta S\, b_n](1-\mathrm{t}) - k\Delta I \qquad (2.1)$$

where

Δ NP = Change in net profit

ΔS	=	Increase in sales
V	=	Ratio of variable cost to sales
b_n	=	Bad debt ratio on new sales
T	=	Tax rate
K	=	Cost of capital
ΔI	=	Increase in receivable investment
ΔI	=	$\frac{\Delta S}{360} \times ACP \times V$
$\frac{\Delta S}{360}$	=	Average daily change (increase in sales)
ACP	=	Average collection period

Now let us see how each component of equation 2.1 affects net profit. $\Delta S (1-V)$ represents the increase in gross incremental profit, due to relaxed credit standard and for this purpose gross profit, is defined as Sales-Variable cost. ΔSb_n calculates the bad debts on incremental sales. The first part of the equation $[\Delta S (1-V) - \Delta Sb_n]$ (1-t) represents the post tax operating profit arising out of incremental sales and $k \Delta I$ measures the post tax opportunity cost of capital locked in additional investment on account of relaxed credit standards. The pre tax operating profit is multiplied by (1–t) in order to get past tax operating profit.

Example 2.1: The current sales of M/s ABC are Rs.100 lakhs. By relaxing the credit standards the firm can generate additional sales of Rs.15 lakhs on which bad debt losses would be 10 per cent. The variable cost for the firm is, 80% percent average collection period ACP is 40 days and post tax cost of funds is 10 percent and the tax rate applicable to the firm is 40 percent. Find out whether the firm should relax credit standards or not?

Solution:

$$\Delta \quad NP = [\Delta S (1-V) - \Delta S\, b_n] (1-t) - k \Delta I$$

$$\Delta \quad NP = [15 (1-.80) - 15 \times .1] (1-.4) -.10 \times \frac{15}{360} \times 40 \times .80$$

$$= [3 - 1.5] (.6) -.1333$$
$$= .9 -.1333$$
$$= .7667 \times 1,00,000$$
$$= 76,667$$

Since the impact of change in credit standards results in a positive change in net profits therefore the proposed change should be accepted.

Credit Period

Credit period refers to the length of time provided to the buyer to pay for their purchases. During this period no interest is charged on the outstanding amount. The credit period generally varies from 30 to 90 days and in some businesses even a period of 180 days is allowed. If a firm allows 45 days of credit with no discount for early payment credit terms are stated as ‘net 45’. In case the firm allows discount for early payment the credit terms are stated as 1.5/15, net 45’ implying that if the payment is made within 15 days a discount of 1.5 percent is allowed else the whole amount is to be paid within 45 days.

Increasing the credit period results in increased sales but at the same time entails increased investment in debtors and higher incidence of bad debts. Decreasing the credit period would have the opposite result. The effect of increasing the credit period on net profit can be estimated with the help of equation 2.2.

$$\Delta NP = [\Delta S(1-V) - \Delta Sb_n](1-t) - k\ \Delta\ I \qquad (2.2)$$

In this case ΔI is calculated as follows:

$$\Delta I = (ACP_n - ACP_0)\left[\frac{50}{360}\right] + V(ACP_n)\frac{\Delta S}{360} \qquad (2.2a)$$

Where ΔI = increase in investments

ACP_n = new average collection period
ACP_0 = old average collection period

In equation 2.2a the first term represents incremental investments in receivables associated with existing sales and the second term represents the investment in receivables arising from incremental sales.

Example 2.2: M/s ABC has an existing sales of Rs.50 lakhs and allows a credit period of 30 days to its customers. The firm's cost of capital is 10 percent and the ratio of variable cost to sales is 85. The firm is contemplating on increasing the credit period to 60 days which would result in increased sales of Rs.5 lakhs. The bad debts on increased sales are expected to be 8 percent. The tax rate for M/s ABC is 40 percent. Should the firm extend the credit period?

Solution: $\Delta I = (ACP_n - ACP_0)\ [\frac{S0}{360}] + V\,(ACP_n)\frac{\Delta S}{360}$

$$\Delta I = (60-30)\left[\frac{50}{360}\right] + .85\times 60\times\frac{5}{360}$$

$$\Delta I = 30\times\frac{50}{360} + .708333$$

$$\Delta I = 4.8749997\times 1{,}00{,}000 = 4{,}87{,}500 = 4{,}874{,}99.9$$

$$\Delta NP = \left[\Delta S\,(1-V) - \Delta\,Sb_n\right](1-t) - k\Delta I$$

$$= [5\,(015) - 5\times .08](1-04) - .10\times 4{,}87{,}500$$

$$= [.75 - .4](.6) - 4.875000$$

$$= (.35)(-6) - .48750$$

$$= (.21 - .48750)\times 1{,}00{,}000$$

$$= -27{,}750$$

The increase in credit period results in a negative net profit therefore the credit period should not be extended.

Cash Discount

Cash discount is offered to buyers to induce them to make prompt payment. The credit terms specify the percentage discount and the period during which it is available. Liberal cash discount policy imply that either the discount percentage is increased or the discount period is increase. This leads to enhanced sales, decrease in average collection period and increase in cost. The effect of this on net profit can be estimate by the equation 2.3.

$$\Delta NP = [\Delta S\,(1-V) - \Delta DIS](1-t) + k\Delta I \qquad (2.3)$$

Where Δ I = Savings in receivables investment

Δ DIS = Increase in discount cost

$$\Delta I = \frac{S0}{360}(ACP_0 - ACP_n) - V\frac{\Delta S}{360}ACP_n \qquad (2.3a)$$

$$\Delta DIS = P_n(S_0 + \Delta S)d_n - P_0S_0d_0 \qquad (2.3b)$$

Where Pn = Proportion of discount sales after liberalizing the discount terms.
S_0 = Sales before liberalizing the discount terms
ΔS = Increase in sales
d_n = New discount percentage
P_0 = Proportion of discount sales before liberalizing the discount terms
d_0 = Old discount percentage

Example 2.3: M/s ABC's present credit terms are 1/10 net 30 which they are planning to change to 2/10 net 30. The present average collection period is 20 days and the variable cost to sales ratio is 85 and the cost of capital is 10 percent. The proportion of sales on which customers currently take discount is .5. After relaxation of discount terms it is expected that the ACP will reduce to 14 days, sales will increase from Rs.80 lakhs to Rs 85 lakhs and the proportion of discount sales will increase to .8. Tax rate for the firm is 40% calculate the effect of above changes on net profit.

Solution: $\Delta I = \frac{S_0}{360}(ACP_0 - ACP_n) - \vee\frac{\Delta S}{360}ACP_n$

$$= \frac{80}{360}(20-14) - .85 \times \frac{5}{360} \times 14$$

= 1.1680555 lakhs

$\Delta DIS = P_n(S_0 + \Delta S)d_n - P_0S_0d_0$

= .96 lakhs

$\Delta NP = \Delta S(1-v) - \Delta DIS](1-t) + k\Delta I$

$= [5(1-.85) - .96](1-.4) + .1 \times 1.1680555$

$= (.75 - .96)(.6) + .116805555$

$= -.126 + .11680555$

$= -.009194$ lakhs

Since the increase in net profit is negative the cash discount policy should not be liberalized.

Collection Effort

The collection policy of a firm is aimed at timely collection of overdue amount and consists of the following.

1) Monitoring the state of debtors (account receivable)
2) Reminders
3) Personal letters
4) Telephone calls
5) Personal visit of salesman
6) Restriction of credit
7) Use of collection agencies
8) Legal action.

An efficient and rigorous collection program tends to decrease sales, shorten average collection period, reduce bad debts percentage and increase the collection expenses, whereas a lax collection program will have just the opposite effect. The effect of decreasing the collection effort on net profit can be estimated with the equation 2.4.

$$\Delta NP = [\Delta S(1-V) - \Delta BD](1-t) - k\Delta I$$

Where ΔBD = increase in bad debt cost

ΔI = increase in investment in receivables

$$\Delta I = \frac{S_0}{360}(ACP_n - ACP_0) + \frac{\Delta S}{360} ACP_n V$$

$$\Delta BD = b_n (S_0 + \Delta S) - b_0 S_0$$

Example 2.4: M/s ABC is considering relaxing its collection efforts. At present its sales are Rs.40 lakhs, the ACP is 20 days and variable cost to sales ratio is .8 and bad debts are .05 per cent. Relaxation in collection effort is exected to push sales up by Rs. 5 lakhs, increase ACP to 40 days and bad debt ratio to 0.06. ABC tax rate is 40 percent. Calculate the effect of relaxing credit effort on net profit.

Solution:

$\Delta BD = b_n (S_0 + \Delta S) - b0\ S0$

$= .06\,(40+5) - .05 \times 40$

$= 2.7-2$

$= .7$ lakhs

$$\Delta I = \frac{S_0}{360}(ACP_n - ACP_0) + \frac{\Delta S}{360} ACP_n V$$

$$= \frac{40}{360}(40-20) + \frac{5}{360} \times 40 \times .8$$

$$\frac{20}{9} + \frac{4}{9}$$

$$\Delta I = 2.6666667$$

$$\Delta NP = [\Delta S(1-V) - \Delta BD](1-t) - k\Delta I$$

$$= [5(.2) - .7](.6) - .12(2.666667)$$

$$= .18 - .32$$

$$= -.14 \text{ lakhs}$$

Since the effect on net profit is negative therefore the credit efforts should not be relaxed.

Check Your Progress 1

1) As a part of the strategy to increase sale and profit, the sales manager of the company proposes to sell goods to a group of new customers with 10% risk of non-payment. This group would require one and a half months credit and is likely to increase sales by Rs. 1, 00,000 per annum. Production and selling expenses amount to 80% of sales and the income tax rate is 50%. The company's minimum required rate of return (after tax) is 25%. Should the Sales manager's proposal be accepted?

2) Manjit Ltd. is examining the question of relaxing its credit policy. It sells at present 20,000 units at a price of Rs. 100 per unit, the variable cost per unit is Rs. 88 and average cost per unit at the current sales volume is Rs. 92. All sales are on credit, the average collection period being 36 days.

   A relaxed credit policy is expected to increase sales by 10% and the average age of receivables to 60 days. Assuming 15% return, should the firm relax its credit policy? Assume 360 days in a year.

3) A company wants to adopt a stricter collection policy. While going through its books the following details are revealed:

   The enterprise is at present selling 20,000 units on credit at a price of Rs. 30 each, the variable cost per unit is Rs. 23 while the average cost per unit is Rs. 27. Average collection period is 56 days and the collection expenses amount to Rs. 8,000 and bad debts are 3%. If the policy of collection is tightened a sum of Rs. 15,000 more will be required as collection charges. Bad debts down to 1 percent and collection period will reduce to 40 days. Sales volume is expected to reduce by 400 units.
   Advice the company whether it should implement the decision or not. Assume 20% rate of return on investments.

4) The present credit terms of Padmavati Ltd. are '1/10 net 30'. Its annual sales are Rs. 80, 00,000, and average collection period is 20 days. Its variable cost and average table costs to sales are 0.85 and 0.95 respectively and its cost of capital is 10 per cent. The proportion of sales on which customers currently take discount is 0.5. The company is considering relaxing its discount terms of '2/10 net 30'. Such relaxation is expected to increase sales by Rs. 5, 00,000, reduce the average collection period to 14 days and increase the proportion of discount sales to 0.8. What will be the effect of relaxing the discount on the company's profit? Take year as 360 days.

14.4 CREDIT EVALUATION

One of the important elements of credit management is the assessment of the credit risk of the customer. While assessing risk two type of errors occur which are as follows?

Type 1 error: Good customers are misclassified as poor credit risk
Type 2 error: Bad customers are misclassified as good credit risk.

Both the errors are costly. Type 1 error leads to loss of profit on sales and also loss of good customers. Type II errors leads to bad debts and other costs associated with the bad debts. These type of errors can't be totally eliminated but a proper credit evaluation process can reduce these two types of errors. The credit evaluation process involves the following steps.

1) Credit information
2) Credit investigation
3) Credit limits
4) Collection policy.

Credit Information

In order to ensure that the receivables are collected in full and on due date from the customers, prior information of their credit worthiness should be available. This information can be gathered from a variety of sources, which we are going to discuss shortly. One important thing which needs to be kept in mind while gathering credit information is that collecting credit information involves cost, therefore the cost of collecting information should be less than the potential profitability of credit sales. Another factor which should be borne in mind is that collecting credit information may involve a lengthy period of time, on account of this the credit granting decision should not be delayed for long. Depending upon these two factors any or a combination of the following process may be employed to collect the information.

- **Financial Statements:** Profit and loss a/c and Balance sheet of customers firm provide valuable insight on the operating financial soundness, sources of funds, application of funds, and debtors and creditors. The following ratio calculated from financial statements seems particularly helpful in this context: Current ratio, and acid test ratio, debt equity ratio, Earning before Interest and Taxes (EBIT) to total assets ratio and return on equity.

- **Bank References**: A customer's bank account is also a valuable source of information regarding the credit worthiness of the customer. A thorough analysis of bank transactions would reveal the financial behaviour and characteristics of the customer. Bank references can be obtained either directly or by requesting the customer to instruct his bank to provide the same.

- **Trade references**: The seller can ask the prospective customer to give trade references. Trade references are usually of those firms with whom the customer is having current dealings.

- **Other Sources**: A firm can also obtain information about the prospective customer from credit rating agencies like (CRISIL, ICRA, CARE) and trade and industry associations.

Credit Investigation

Once the credit information is gathered the next step is to analyse the gathered information and isolate those matters, which may require further investigation. The factors that affect the extent and nature of credit investigation are as follows:

- Type of customer, whether new or existing
- The customer's business line, background and the related trade risks
- The nature of products-perishable or seasonal
- The size of the customer's order and expected further volume of business with him/her
- Company's credit policies and practices
- Capacity: Capacity refers to the ability of the buyer to pay the due on time and is generally judged by the past turnover and the repayment behaviour
- Character: Character refers to the willingness of the buyer to pay. The character of the buyer is generally judged by his/ her past record of payments and default history if any.
- Collateral: Collateral means the security against the credit granted to customers. A buyer willing to furnish adequate collateral is judged as more creditworthy as compared to buyers who are unable to furnish any collateral.
- Conditions: Conditions here refer to the sensitivity of the buyer to general economic environment.

Analysis of Credit File: Credit file is a compilation of all the relevant credit information of the customer. All the credit information collected during the credit information process is annexed to this file. The information of all the previous transactions and payments related to it are also recorded in the credit file. Any change in customer's payment behaviour like extension of time delayed payments enhancing credit limits etc. are also recorded in the credit file. In case of new customers the credit information collected should be thoroughly analysed and examined and in case of existing customer the credit file should be analysed while extending credit for larger accounts or for longer periods.

Analysis of Financial Ratios: Ratios are calculated to determine the customer's liquidity position and ability to repay debts. The ratios so calculated should be compared with the industry average and the nearest competitors.

Analysis of Business and its Management: Besides analyzing the fundamental strength of the customers business the firm should also take into consideration the quality of the management and the nature of the customer business. Some businesses are inherently risky and granting credit to such customers may prove risky.

Credit Limit

A credit limit is the maximum amount of credit, which the firm will extend at a point of time. It indicates the extent of risk taken by the firm by supplying goods on credit to a customer. Once the firm has decided to extend credit to the customer the amount and duration of the credit will have to be decided. The amount of credit to be granted will depend on the customer's financial strength.

Collection Policy

Proper management of receivables requires an appropriate collection policy which outlines the collection procedures. Collection policy refers to the procedure adopted by a firm to collect payments due on past accounts. The basic objective of the collection policy is to minimize average collection period and bad debt losses. A strict collection policy can affect the goodwill and can adversely affect potential future sales whereas on the other hand a lenient collection policy can lead to increased average collection period and increased bad debt losses. An optimum collection policy should aim towards reducing collection expenditure.

14.5 MONITORING RECEIVABLES

A firm needs to continuously monitor and control its receivables to ensure that the dues are paid on the due date and no dues remain outstanding for a long period of time. The following two methods are used to evaluate the management of receivables.

1. Average collection period
2. Aging schedule.

Average collection period (ACP): Average collection period is defined as

$$ACP = \frac{\text{Debtors} \times 365}{\text{Credit Sales}}$$

The average collection period so calculated is compared with the firm's stated credit period to judge the collection efficiency. For example, if the firm's stated collection period is 45 days and the actual collection period is 60 days, one may conclude that the firm's collection efforts are lax. An extended credit period leads to liquidity problems and may also result in bad debts. Two major drawbacks of this method are:

(i) It gives an average picture of collection efforts and is based on aggregate data. It fails to pin point the receivables which are overdue.

(ii) It is susceptible to sales variation and the period over which sales and receivable have been aggregated.

Ageing Schedule: The ageing schedule (AS) classifies outstanding accounts receivable at a given point of time into different age brackets. An illustrative ageing schedule is given below.

Age Groups (in days)	Outstanding (Rs.)	Percentage
0-30	45,000	37.50
31-60	15,000	12.50
61-90	10,000	12.50

91-120	30,000	250
Over 120	1,20,000	100.00

The actual aging schedule of the firm is compared with some standard ageing schedule so as to determine whether accounts receivables are in control. If the greater proportion receivable are in the higher age schedule than there is a need for some corrective action.

14.6 FACTORING

Receivable management is a specialized activity and requires a lot of time and effort on the part of the firm. Collection of receivables often poses problems, particularly for small and medium size organizations. Banks do finance receivables but this accommodation is for a limited period and the seller has to bear the risk in case debtors default on payment.

In order to overcome these problems the firms can assign its credit management and collection to specialist organisation known as factoring organisations.

Factoring is financial as well as management support to a firm. Through factoring non-productive, inactive assets (Book debts or receivables) are assigned to a factor which may be a bank or a financial institution or any other organisation which in turn collects receivables from the debtors for a commission. The factoring can be defined as “a business involving a continuing legal relationship between the factor and a business concern (the client) selling goods and services to trade customers (the customers) whereby the factor purchases the clients accounts receivable and in relation thereto, controls the credit extended to customers and administers the sales ledger”.

Factoring Services: The following basic services are provided by the factor apart from the core service of purchasing receivables.

1) Sales Ledger administration and credit management
2) Credit collection and protection against default and bad debt losses
3) Financial accommodation against the assigned book debts (receivables).

In addition to these services the following services are also being provided by the factor
1) Providing information about prospective buyers
2) Providing financial counselling
3) Assistance in liquidity management and sickness prevention
4) Financing acquisition of inventories
5) Providing assistance for opening letter of credit for the client.

Types of Factoring

The factoring facilities can be broadly classified in four groups which are as follows:

1) Full service non recourse (old line)
2) Full service recourse factoring
3) Bulk agency factoring
4) Non notification factoring.

Full Service Non Recourse: Under this method the book debts are purchased by the factor assuming 100 percent credit risk. In case of default by the debtor the whole risk is borne by the factor. In addition to this the factor may also advance 80-90% of the books debts immediately to the client. Payments are made directly to the factor by the customers. The factor also maintains the sales ledger and accounts and prepares age-wise reports of outstanding book debts. This type of factoring services are specially suited to the following conditions when,

a) Amounts involved per customer are relatively substantial

b) There are large number of customers of whom the client can't have personal knowledge

c) Clients wish to have 100% cover rather than 70 to 80% cover provided by the insurance companies.

Full Service Recourse Factoring: In this type of factoring the client has to bear the risk of default made by the debtors. In case the factor had advanced funds against book debts on which the customer subsequently defaults the client will have to refund the money. This type of factoring is more a method of short-term financing rather than pure credit management and protection service. This type of factoring is suitable for cases where there is a high spread customer with relatively low exposure or where the client is selling to high risk customers.

Advance Factoring and Maturity Factoring: In both non-recourse and recourse factoring if the factor advances cash against book debts to the client immediately on assignment of book debts it is known as advanced factoring. In maturity factoring the factor makes payment to the client on maturity of book debts i.e., when they are due. In non-recourse maturity factoring the payment is on maturity or when book debts are collected or when the customer becomes insolvent. In recourse factoring the factor pays the client when book debts have been collected.

Bulk Agency Factoring: This type of factoring is basically used as a method of financing book debts. Under this type of factoring the client continues to administer credit and maintain sales ledger. The factor finances the book debts against bulk either on recourse or without recourse. This sort of factoring became popular with the development of consumer durable market where credit management is not a problem, but the firms require temporary financial accommodation.

Non-Notification Factoring: In this type of factoring customers are not informed about the factoring agreement. The factor performs all the usual functions without disclosing to customer that they own the book debts.

Costs and Benefits of Factoring

There are two types of costs involved in factoring:

1) the factoring commission or service fee, and

2) the interest on advances granted by the factor to the firm.

Factoring commission is paid to cover credit evaluation, collection, maintenance of sales ledger, other services and to cover bad debt losses. The factoring commission will depend upon the total volume of receivables, the size of individual receivables and quality of receivables. The commission for non- recourse factoring is higher than recourse factoring as the former factor assumes full credit risk.

In India the cost of factoring varies from 2.5% to 4% where as in developed countries it ranges from 1% to 3%.

The interest on advances is usually higher than the prime lending rates of the bank or the bank overdraft rate. In the United States of America, factors charge a premium of 2 to 5% over and above the prime interest rate.
The high cost of factoring is partly off set by the benefits of factoring some of which are as follows:

- Factoring provide specialized service in credit management, thereby freeing resources in the form of management's time and attention which they can focus on core issues of manufacturing and marketing, and

- Factoring helps the firm to save cost of credit administration due to the scale of economies and specialization.

14.7 NON-PERFORMING ASSETS

Non Performing Assets (NPAs) refers to those loans and advances that are in default or in arrears i.e. principal and interest payments are late or missed. As per the RBI, an asset becomes non-performing when it stops to generate income for the bank**.** A non performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.
NPAs can be classified as a substandard asset, doubtful asset, or loss asset, based on the length of time overdue and probability of repayment. **- Substandard Asset-** an asset classified as an NPA for less than a period of 12 months.
Doubtful Asset - an asset that has been non-performing for more than a period of 12 months.
Loss Assets - loans with losses that need to be fully written off. It is identified by the bank, auditor, or inspector.

14.7.1 Provisions for NPAs

Provisioning means an amount that the banks set aside from their profits in a particular quarter for non- performing assets. Such assets that may turn in to losses in the future. Provisioning is done according to which category the asset belongs to. Banks are required to make their NPAs number public to the RBI as well from time to time. There are primarily two metrics that help us to understand the NPA situation of any bank. NPA number for a bank will be mentioned in the standalone financial statements of a bank. There are two types of NPAs.
GNPA stands for gross non performing assets. GNPA is absolute amount. It tells you the total value of gross non performing assets for the bank in a particular quarter or financial year.
NNPA stands for net non performing assets. NNPA subtracts the provision made by the bank from gross NPA. Therefore NNPA gives you the exact value of the non performing assets after the bank has made specific provisions for it.

14.7.2 Reasons for growing NPAs

A strong banking sector is important for a flourishing economy. The failure of the banking sector may have an adverse impact on other sectors. The Indian banking system, which was operating in a closed economy, now faces the challenges of an open economy. One of the main causes of NPAs into banking sector is the directed loans system under which commercial banks are required a prescribed percentage of their credit (40%) to priority sectors. Irrational lending and deficiencies in evaluation and monitoring are among the factors that have resulted in Indian banks making bad loans worse. There are two types of factors that are responsible for growing NPAs
Internal Factors:
1. Funds borrowed for particular purpose are not utilized for the same
2. **Defective lending process**: There are three principles that are followed by the commercial banks in lending process i.e. principle of safety, principle of liquidity, principles of profitability. Principle of safety means that the borrower is in position to pay back the loan. Therefore the banker should take utmost care in ensuring that the

enterprise or business for which a loan is sought is a sound one and the borrower is competent of carrying it out successfully, he should be a person of integrity and good character.
3. **Inappropriate technology**: Due to improper technology and management information system, market driven decisions on real time basis cannot be taken. So all the branches of the banks should be upgraded with current scenario.
4. **Improper SWOT analysis**: The inappropriate strength, weakness, opportunity and threat analysis is another reason for increase in NPA's. so the bank should examine the profitability, viability, long term acceptability of the project while financing.
5. **Poor credit appraisal system**: Due to poor credit appraisal the bank gives advances to those who are not able to repay it back. As a result the NPA's of the bank increases. So the bank should maintain proper credit appraisal system.
6. **Managerial deficiencies**: The banker should always select the borrower very cautiously and should take tangible assets as security to safeguard its interests. The banker should follow the principle of diversification of risks which means that the banker should not grant advances to a few big firms only or to concentrate them in few industries or in few cities.
7. **Absence of regular follow up**: The irregularities in spot visit also increase the NPA's, the absence of regular visit of bank officials to the customer point decreases the collection of interest and principal on the loan.
8. **Incomplete and faulty documentation**: There should thorough verification by the officials on the documents submitted by the borrowers.

External Factors:
1. **Ineffective recovery tribunal**: The government has set of number of recovery tribunals, which works for recovery of loans and advances, due to their carelessness and ineffectiveness in their work the bank suffers the consequence of non-recovery, thereby reducing their profitability and liquidity.
2. **Willful Defaults**: The Indian Public Sector Banks are worst hit by these defaults. It is a default in repayment obligation. Ex: Kingfisher Airlines Ltd. Is one among many of those willful defaulters? Others are Beta, Napthol, Winsome Diamonds & Jewellery Ltd.
3. **Natural calamities**: This is the measure factor, which is creating alarming increase in NPA's of the PSBs. Basically our farmers depends on rainfall for cropping due to irregularities of rainfall the farmers are unable to attain the production level and thus they are unable to repay the loans. So the banks has to make large amount of provisions in order to pay those loans
4. **Lack of demand**: Entrepreneurs in India could not predict their product demand and starts production which ultimately piles up their product. Thus, making them unable to pay back the money they borrow to operate these activities. Therefore the banks record the non recovered part as NPA's and has to make provision for it.

Growth of Sick Industry has also made Banking NPA Rise. Let us have a look and discuss these points in brief.

a) Before the financial crisis of 2008 India's economy was in a boom phase. During this period banks lent extensively to corporates in the expectation that the good times will continue in future. But future does not always play out as it had been in the past. The businesses of most of the corporates were adversely affected due to slowdown in the global economy following the financial crisis.

b) The ban in mining projects, and delay in environmental related permits affected power, iron and steel sector with added volatility in prices of raw material. All these factors weighed heavily on the earning of the corporates. Low earnings affected their ability to pay back loans. This is the one of the most important reason behind increase in NPA of public sector banks.

c) Another major reason of rising NPA was the relaxed lending norms for corporate houses. Their financial status and credit rating were not analyzed properly. The banks were willing to accept higher leverage and less promoter equity. They even accepted reports by the promoter's investment banks rather than doing their own analysis. Around 40% of the outstanding loans have been made to companies with interest coverage ratio less than one. Also, to stay competitive, banks were selling unsecured loans which contributed to the high levels of NPAs.

d) Public Sector banks provide major portion of the credit to industries and it is this part of the credit distribution that forms a great portion of NPA. In the case of kingfisher airlines financial crisis, SBI provided a huge amount of loan which it is not able to recover from it.

e) The priority sector lending (PSL) sector has contributed substantially to the NPAs. Priority sector includes agriculture, education, housing, MSMEs. As per the estimates by the SBI, education loans constitute 20% of its NPAs.

f) There are also cases of credit default by promoters, where the funds have been diverted by over-invoicing imports, sourced via, a promoter owned subsidiary abroad or exporting to shell companies and then declaring, that they defaulted.

14.7.3 Suggestions to reduce NPAs

In order to reduce the NPAs, following suggestions are very useful. Let us discuss them in brief.

Proper monitoring: Proper monitoring of end use of money by banks is Essential, especially in case of large value advances to detect the diversion of funds. According to Reserve Bank of India (RBI), diversion of funds refers to using the borrowed funds for the purposes other than the purpose for which the loan was sanctioned.

Strong legal actions against defaulters: The RBI and the government realized that the there should be strong legal actions against the willful de- faulters and the law and home ministries opined that the diversion of funds is considered as a breach of trust and hence it is a punishable offense. On January 28, the RBI set up the working group to recommend appropriate measures, including criminal action and penalties, against the default borrowers who have intentionally diverted the borrowed funds.

Political intervention need to be removed: Being a democratic country, the finance ministry interferes in the selection of a chairman, directors and managing directors of the bank. The government forces banks to provide financial assistance to certain sectors and individuals. This can be removed by giving autonomy to the boards of the banks. The RBI is also under the political interference today. The bank should be permitted to choose the sector they wish to offer financial assistance. For example, foreign banks concentrate on export credit rather than agriculture. Similarly, private sector banks prefer to lend housing credit in urban areas.

Strong follow-up supervision: NPA has not occurred overnight and therefore, will require a regular institutional visit. The technical team must be formed for the field visit. Physical verification of progress achieved by the assisted unit helps to monitor the end use of funds and regular recovery of loans.

14.7.4 NPAs Recovery Mechanism

Govt. of India has taken various measures and initiatives to recover the amount blocked in NPAs. Let us discuss those measures/initiatives in details.

i) **Lok Adalat:** established by the government itself, it remains as one of the preferred "alternative dispute redressal mechanisms". A physical platform where pending legal cases of the court of law or at pre-litigation stage get amicably settled. Assigned with statutory grade, the Lok Adalats which enables their decisions or verdicts equated with court decrees given by the civil courts. Such verdicts are compulsively decisive and be acted upon by the involved parties. It may be noted that the verdicts of Lok Adalats can't be appealed s further before any court of law.

ii) **Debt Recovery Tribunal (DRT)**: with an objective of speedy redressal pertaining to the matters of Banks on NPAs, the Debt Recovery Tribunal aims at debt recovery by banks and other financial institutions. This tribunal was formed by virtue of the Recovery of Debts Due to Banks and Financial Institutions Act, 1993 (RDDBFI Act).and facilitates fast resolution between financiers and debtors by filing Original Applications (OAs) in DRTs. It also help appeals to Debts Recovery Appellate Tribunals (DRATs) with a view to reduce disputes become NPAs.

iii) SARFAESI Act:

Is an abbreviated form of the "Securitization and Reconstruction of Financial Assests and Enforcement of Security Interest Act, 2002".got created because of the government's efforts towards reforming the banking systems and supportive legal structures for a performing debt recovery structure involving defaulting loan recoveries support to banks and relieve them of NPA stresses. The main purpose behind its formation is the empowerment of banks and related financial institutions recover assets by enabling them to take possession of securities and selling them for NPA burden reduction. **It gives three elective techniques to recuperation of non-performing resources, viz;**

• Securitization
• Asset Reconstruction
• Enforcement of Security without intercession of the court

Securitization: governed with the section 7 of the SARFAESI Act, it says for any securitization or reconstruction entity acquire a financial asset and thereafter by offering security receipts to qualified institutional buyers, (other than by offer to public) as they come with expertise and experience for evaluating financial investment win stock markets.

Asset Reconstruction company (ARC): ARCs buy NPAs from the banks and thereafter attempts recovering the bad loans from the borrower, within the authorities conferred by the Act. These ARCs work under the legal framework and remain compliant to any court orders.

Enforcement of Security Assets: stands applicable under the Section 13 of SARFAESI Act, it complies with section 69 or section 69A of the Transfer of Property Act, 1882, endorses the law involving execution of security interests in states, a secured creditor may be enforced, without the intervention of court or tribunal, by such creditor. In case of a borrower having liability towards secured creditor(s) defaults repayment of secured debt installment(s); his account be classified by the secured creditor (read: bank or FI) as NPA. Thereafter, the secured creditor would issue a written notice to the borrower for fulfilling his obligations within sixty days. Failing which the bank, here, for recovering his loan, may opt from the below-mentioned measures:

a. Go on to possess the borrower's secured assets along with the right to transfer by lease, sale etc.
b. Take control of borrower's business and its management along with the right to transfer by lease, sale, etc.
c. The bank deputes a person as 'Manager' to govern the possessed borrower's business assets;
d. Issue written notice, to any person who owes money from the banks' borrower or is in process of acquiring secured asset from the bank's borrower but is yet to receive the money from him making him liable to directly and instead, pay the bank (secured creditor) that much money, sufficient to close the loan account.

iv) **Bankruptcy Code**

A very important move by the Govt. of India; the introduction of this "Insolvency and Bankruptcy (IBC) Code Bill" in 2015, came into force in 2016. Prior to that the impending issues on insolvencies and bankruptcies took the long route at four forums namely the (i) Supreme court, (ii) Board for Industrial and Financial Reconstruction (BIFR), (iii) Debt Recovery Tribunal (DRT) and (iv) Company Law Board (CLB). With the IBC coming the burden of the above four forums was drastically reduced with all such matters being brought to National Company Law Tribunal (NCLT). The IBC poised to provide speedy remedies for the banks against NPAs while reducing the earlier burden on the courts.

IBC provisioned for "Insolvency and Bankruptcy Board of India", an entity for steep enactment of the IBC code through legal amendments pertaining to reorganization and insolvency resolution of business entities, partnership firms and single entities in a time framed way for asset worth maximization of defaulting entities (individual or firm) by resorting to push entrepreneurship, credit availability and re-generate interest of investors. Role of IBC includes provisioning and creating a proper Insolvency Resolution Process (IRP).

A debtor, who stand defaultering on dues towards the creditors, can file/ initiate the IRP. This initiation also starts the 180 day time period within which the creditors' claim be processed. It is defined that within these prescribed 180 day window, 75% of economic creditors must conform for a revival plan. If this doesn't yields the positive results, the firm is referred for liquidation. This involves resolution professional applying to the Adjudicating Authority towards increasing the time of company insolvency resolution process to more than 180 days, a resolution be passed by creditors' committee requiring 75% of voting shares.

Check Your Progress 2

1. The Indian banking sector is facing the problem of heavy NPAs. Which among the following industries has contributed least to the level of NPAs?

a) Real estate sector

b) Iron and steel

c) Software and BPO

d) Infrastructural development

2. Which of the following is not part of criteria laid down by RBI for NPA ?

a) Interest on loan remains overdue for a period of 90 days.

b) Interest on loan taken for a long-duration agricultural crop remains unpaid for one crop season.

c) Interest on loan taken for a short duration agricultural crop remains unpaid for two crop seasons.

d) Interest on loan taken to purchase personal asset remains overdue for 60 days.

3. Which of the following statements is correct regarding Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002?

a) The act enables banks to recover NPAs through easy disposal of secured assets.

b) The act enables banks to do multiple lending on deposits received by the public.

c) The act requires courts to give priority to cases involving NPAs of banks.

d) None of the above

4. Expand the term SARFAESI Act-

a) Securitization and Reconstruction of Financial Assets and Enforcement of Social Interest
b) Securitization and Reconstruction of Financial Assets and Enactment of Security Interest
c) Securitization and Reconstruction of Ferry Assets and Enforcement of Security Interest
d) Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest

5. A doubt-full asset refers to-

a) Remaining NPA for less than or equal to 18 months
b) Remaining NPA for more than 18 months
c) Where the loss has been identified by the bank
d) When loan is overdue for a period of 1 year

14.8 SUMMARY

Trade credit creates debtors or accounts receivables. Trade credit is used as a marketing tool to gain competitive advantage over trade rivals. A firm's investment in accounts receivable would depend upon the volume of credit sales and collection period. This investment in receivables can be increased or decreased by altering the credit policy variables. The main variables of credit policy are credit period and cash discount. The collection efforts of the firm are aimed at reducing bad debt losses and accelerating collection from slow players. Factoring involves sale of receivables to specialized firms known as factors. Factoring is basically used to improve liquidity and for the timely collection of debts. Factors charge interest on advances and commission for other services.
A non performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.
NPAs can be classified as a substandard asset, doubtful asset, or loss asset, based on the length of time overdue and probability of repayment. -
Reasons for growing NPAs are: i) Defective lending process, ii). Poor credit appraisal system, iii) Managerial deficiencies iv) Absence of regular follow up v) Incomplete and faulty documentation. In order to reduce the NPAs, following Suggestion have been given
i) Proper monitoring, ii) Strong legal actions against defaulters, iii) Political intervention need to be removed, and iv) Strong follow-up supervision

14.9 KEY WORDS

Negotiable Instrument: A document guaranteeing the payment of a specific amount of money, either on demand, or at a set time, whose payer is usually named on the document.

Factoring: Factoring is a financial transaction and a type of debtor finance in which a business sells its accounts receivable to a third party at a discount. A business will sometimes factor its receivable assets to meet its present and immediate cash needs

NPAs: A non performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.

Gross NPAs: It refers to the entire amount of debts that an organization has not collected or the individuals owing the organization have not fulfilled their contractual obligations to pay both the amount of principal and interest.

Net NPAs: It refers to the sum of the non-performing loans less provision for bad and doubtful debts.

Credit Period: Credit period refers to the length of time provided to the buyer to pay for their purchases.

Letter of credit: a letter issued by a bank to another bank (especially one in a different country) to serve as a guarantee for payments made to a specified person under specified conditions. It is a payment mechanism used in international trade to provide an economic guarantee from a creditworthy bank to an exporter of goods.

Cash Discount: Cash discount is offered to buyers to induce them to make prompt payment.

14.10 ANSWER TO CHECK YOUR PROGRESS

Check Your Progress 1

1) Net Benefit Rs. 2,500; Proposal should be accepted. Profit on Additional Sales Rs. 5,000; Additional Investment in Receivables Rs. 10,000 and cost is Rs.2, 500.

2) Net Profit Rs. 1200. Credit policy should be relaxed. Profit on Additional Sales Rs. 24,000; Additional Investment in Receivables Rs. 1,52,000 and cost @ 15% Rs. 22,800; Current Investment in Receivables Rs. 1,84,000; Proposed Investment in Receivables Rs. 3,36,000.

3) Net Benefit Rs. 17,124. Collection policy should be tightened. Reduction in bad debt losses Rs. 12,120; and cost of Average Investment in Receivables Rs.5, 004; Loss of Profit on reduced sales Rs. 2,800 and increase in collection charge Rs. 15,000. Average Investment in Present Plan Rs. 84,000 and in proposed plan Rs. 58,978.

4) Net Loss of Rs. 9,986. Present discount policy should not be relaxed. Profit on additional sales Rs. 75,000; Cost savings on average investment in receivables Rs. 11,014; Present Investment Rs. 4,22,222, proposed Rs. 3,12,083. Increase in discount Rs. 96,000.

Check Your Progress 2

1-c, 2-d, 3-a, 4-d, 5-b

14.11 SELF-ASSESMENT QUESTIONS/EXERCISES

1) Describe the major's terms of payment in practice.

2) What are the important dimensions of a firm's credit period? Explain

3) Discuss the consequences of lengthening versus shortening of the credit period.

4) Discuss the effects of liberal versus stiff credit standards.

5) What are the effects of liberalizing the cash discount policy? Discuss

6) Develop a simple system of risk classification and explain its rationale.

7) Once the creditworthiness of a customer has been assessed, how would you go about analyzing the credit granting decision?

8) What benefits and costs are associated with the extension of credit? How should they be combined to obtain an appropriate credit policy? Explain

9) What is the role of credit terms and credit standards in the credit policy of a firm? Discuss

10) What are the objectives of the collection policy? How should it be established? Explain

11) What will be the effect of the following changes on the level of the firm's receivables?
   a. Interest rate increases
   b. Recession
   c. Production and selling costs increase
   d. The firm changes its credit terms from "2/10, net 30" to "3/10, net 30".

13) The credit policy of a company is criticized because the bad-debt losses have increased considerably and the collection period has also increased. Discuss under what conditions this criticism may not be justified.

14) What credit and collection procedures should be adopted in case of individual accounts? Discuss.

15. What do you mean by Non-Performing Assets (NPAs)? State the reasons/factors for growing NPAs.

16. What are the main provisions of NPAs? Discuss the suggestions to reduce NPAs.

17. Write short notes on the following
   i) Debt Recovery Tribunals (DRTs)
   ii) Indian Bankruptcy Code (IBC)
   iii) Securitization
   iv) SARFAESI Act

Exercises

1) The present sales of M/s Ram Enterprises is Rs.50 million. The firm classifies customers into 3 credit categories: A, B and C. The firm extends unlimited

credit to customers in category A, limited credit to customers in category B, and no credit to customer in category C. As a result of this credit policy, the firm is foregoing sales to the extent of Rs. 5 million to customers in category B and Rs 10 million to customer in category C. The firm is considering the adoption of a more liberal credit policy to customers in category C who would be provided limited credit. Such relaxation would increase the sales by Rs. 10 million on which bad debt losses would be 8 per cent. The contribution margin ratio for the firm is 15 per cent, the average collection period is 60 days, and the cost of capital is 12 per cent. The tax rate for the firm is 40 per cent. What will be the effect of relaxing the credit policy on the net profit of the firm?

2) The Aravali Corporation currently provides 45 days of credits to its customer. Its present level of sales is Rs. 15 millions. The firm's cost of capital is 15 per cent and the ratio of variable costs to sales is 0.80. The firm is considering extending its credit period to 60 days. Such an extension is likely to push sales up by Rs. 1.5 million. The bad debt proportion on additional sales would be 5 per cent. The tax rate is 45 per cent. What will be the effect of lengthening the credit period on the firm?

3) The present credit terms of Lakshmi Company are 1/10, net 30. It sales are Rs. 12 million, its average collection period is 24 days, its variable cost to sales ratio is 0.80 and its cost of funds is 15 per cent. The proportion of sales on which customer currently take discount is 0.3. Bhartya Company is considering replacing its discount terms to 2/10, net 30. Such relaxation is expected to increase the proportion of discount sales to 0.7. What will be the effect of relaxing the discount policy on net profit? The tax rate of the firm is 50 per cent.

4) Shyam Venture is considering relaxing its collection efforts. Presently their sales are Rs. 50 million, its average collection period 25 days. The relaxation in collection efforts is expected to push sales up by Rs.6 million, increase the average collection period to 40 days and raise the bad debts ratio to 0.06. The tax rate of the firm is 30 per cent.

5) Ram Enterprises sell on terms 2/10 net 45. Total sales for the year are 40 million. Thirty per cent of the customers pay on the tenth day and avail the discount, the remaining seventy per cent pay, on average collection period and the average investment in receivables.

6) Anil & Company sells on terms 1/5 net 15. The total sales for the year are Rs. 10 million. The cost goods sold is Rs. 7.5 million. Customers accounting for 30 per cent of sales take discount and pay on the fifth day, while others take an average of 35 days to pay.

Calculate:

(a) the average collection period and
(b) the average investment in receivables.

7) Udar Limited is considering a change in its credit terms from 2/10, net 30 to 3/10 net 45. This change is expected to:

a) increase total sales from Rs. 50 million to Rs. 60 million
b) decrease the proportion of customer taking discount from 0.70 to 0.60
c) increase the average collection period from 20 days to 24 days.

The gross profit margin for the firm is 15 per cent and the cost of capital is 12 per cent. The tax rate is 40 per cent.

Calculate:

a) the expected change in profit and
b) the expected cost of increasing the cash discount.

8) The financial manager of a firm is wondering whether credit should be granted to a new customer who is expected to make a repeat purchase. On the basis of credit evaluation the financial manager feels that the probability is the customer will pay 0.85 and the probability that S/he will pay for the repeat purchase thereby increases to 0.95. The revenues from the sale will be Rs.10,000 and the cost of sale would be Rs.8,500. These figures apply to both the initial and the repeat purchase should credit be granted?

9) A firm is wondering whether to sell goods to a customer on credit or not. The revenue from sales will be Rs. 10,000 and the cost of sale will be Rs 8,000. What should be the minimum probability that the customer will pay, in order to sell profitably?