UNIT- IV

MANAGEMENT OF RECEIVABLES

10.15 MEANING AND OBJECTIVE

Management of receivables refers to planning and controlling of 'debt' owed to the firm from customer on account of credit sales. It is also known as trade credit management.

The basic objective of management of receivables (debtors) is to optimise the return on investment on these assets.

Large amounts are tied up in receivables, there are chances of bad debts and there will be cost of collection of debts. On the contrary, if the investment in receivables is low, the sales may be restricted, since the competitors may offer more liberal terms. Therefore, management of receivables is an important issue and requires proper policies and their implementation.

10.16 ASPECTS OF MANAGEMENT OF DEBTORS

There are basically three aspects of management of receivables:

1. ***Credit Policy:*** The credit policy is to be determined. Decision of Credit standards, Credit terms and collection efforts is included in Credit policy. It involves a trade-off between the profits on additional sales that arise due to credit being extended on the one hand and the cost of carrying those debtors and bad debt losses on the other. This seeks to decide credit period, cash discount and other relevant matters. The credit period is generally stated in terms of net days. For example if the firm's credit terms are "net 50". It is expected that customers will repay credit obligations not later than 50 days.

    Further, the cash discount policy of the firm specifies:

    (a)   The rate of cash discount.

    (b)   The cash discount period; and

    (c)   The net credit period.

    For example, the credit terms may be expressed as "3/15 net 60". This means that a 3% discount will be granted if the customer pays within 15 days; if he does not avail the offer he must make payment within 60 days.

2. ***Credit Analysis:*** This requires the finance manager to determine as to how risky it is to advance credit to a particular party.

3. ***Control of Receivable:*** This requires finance manager to follow up debtors and decide about a suitable credit collection policy. It involves both laying down of credit policies and execution of such policies.

    There is always cost of maintaining receivables which comprises of following costs:

    (i)   The company requires additional funds as resources are blocked in receivables which involves a cost in the form of interest (loan funds) or opportunity cost (own funds)

    (ii) Administrative costs which include record keeping, investigation of credit worthiness etc.

    (iii) Collection costs.

    (iv) Defaulting costs.

10.17 FACTORS DETERMINING CREDIT POLICY

The credit policy is an important factor determining both the quantity and the quality of accounts receivables. Various factors determine the size of the investment a company makes in accounts receivables. They are, for instance:

(i)   The effect of credit on the volume of sales;

(ii)   Credit terms;

(iii) Cash discount;

(iv)   Policies and practices of the firm for selecting credit customers;

(v)   Paying practices and habits of the customers;

(vi)   The firm's policy and practice of collection; and

(vii) The degree of operating efficiency in the billing, record keeping and adjustment function, other costs such as interest, collection costs and bad debts etc., would also have an impact on the size of the investment in receivables. The rising trend in these costs would depress the size of investment in receivables.

The firm may follow a lenient or a stringent credit policy. The firm which follows a lenient credit policy sells on credit to customers on very liberal terms and standards.

On the contrary a firm following a stringent credit policy sells on credit on a highly selective basis only to those customers who have proper credit worthiness and who are financially sound.

Any increase in accounts receivables that is, additional extension of trade credit not only results in higher sales but also requires additional financing to support the increased investment in accounts receivables. The costs of credit investigations and collection efforts and the chances of bad debts are also increased.

10.18 FACTORS UNDER THE CONTROL OF THE FINANCE MANAGER

The finance manager has operating responsibility for the management of the investment in receivables. His involvement includes:-

(a) **Supervising** the administration of credit;

(b) **Contribute** to top management decisions relating to the best credit policies of the firm;

(c) **Deciding** the criteria for selection of credit applications; and

(d) **Speed up** the conversion of receivables into cash by aggressive collection policy.

In summary the finance manager has to strike a balance between the cost of increased investment in receivables and profits from the higher levels of sales.

10.19 APPROACHES TO EVALUATION OF CREDIT POLICIES

There are basically two methods of evaluating the credit policies to be adopted by a Company – Total Approach and Incremental Approach. The formats for the two approaches are given as under:

Statement showing the Evaluation of Credit Policies (based on Total Approach)

Particulars	Present Policy	Proposed Policy I	Proposed Policy II	Proposed Policy III
	₹	₹	₹	₹
A. Expected Profit:				
(a) Credit Sales	....	....	....	....

(b) Total Cost other than Bad Debts				
(i) Variable Costs	....	....	....	....
(ii) Fixed Costs	....	....	....	....
	....	....	....	....
(c) Bad Debts	....	....	....	....
(d) Cash discount				
(e) Expected Net Profit before Tax (a-b-c-d)	....	....	....	....
(f) Less: Tax	....	....	....	....
(g) Expected Profit after Tax	....	....	....	....
B. Opportunity Cost of Investments in Receivables locked up in Collection Period	....	....	....	....
Net Benefits (A – B)	....	....	....	....

Advise: The Policy……. should be adopted since the net benefits under this policy are higher as compared to other policies.

Here

(i)   Total Fixed Cost = [Average Cost per unit – Variable Cost per unit] × No. of units sold on credit under Present Policy

(ii)   Opportunity Cost = Total Cost of Credit Sales ×

$$\frac{\text{Collection period (Days)}}{365\,(\text{or }360)} \times \frac{\text{Required Rate of Return}}{100}$$

Statement showing the Evaluation of Credit Policies (based on Incremental Approach)

Particulars	*Present Policy days*	*Proposed Policy I days*	*Proposed Policy II days*	*Proposed Policy III days*
	₹	₹	₹	₹
A. Incremental Expected Profit:				
Credit Sales	....	....	....	....

(a)	Incremental Credit Sales	....	....	....	....
(b)	*Less:* Incremental Costs of Credit Sales				
	(i) Variable Costs	....	....	....	....
	(ii) Fixed Costs	....	....	....	....
(c)	Incremental Bad Debt Losses	....	....	....	....
(d)	Incremental Cash Discount	....	....	....	....
(e)	Incremental Expected Profit (a-b-c-d)	....	....	....	....
(f)	*Less*: Tax	....	....	....	....
(g)	Incremental Expected Profit after Tax	....	....	....	....
		....	....	....	....
B. Required Return on Incremental Investments:					
(a)	Cost of Credit Sales	....	....	....	....
(b)	Collection Period (in days)	....	....	....	....
(c)	Investment in Receivable (a × b/365 or 360)	....	....	....	....
(d)	Incremental Investment in Receivables	....	....	....	....
(e)	Required Rate of Return (in %)	....	....	....	....
(f)	Required Return on Incremental Investments (d × e)	....	....	....	....
Incremental Net Benefits (A – B)		....	....	....	....

Advise: The Policy ......should be adopted since net benefits under this policy are higher as compared to other policies.

Here:

(i)   Total Fixed Cost = [Average Cost per unit – Variable Cost per unit] × No. of units sold on credit under Present Policy

(ii) Opportunity Cost = Total Cost of Credit Sales ×

$$\frac{\text{Collection period (Days)}}{365\,(\text{or }360)} \times \frac{\text{Required Rate of Return}}{100}$$

ILLUSTRATION 15

A trader whose current sales are in the region of ₹6 lakhs per annum and an average collection period of 30 days wants to pursue a more liberal policy to improve sales. A study made by a management consultant reveals the following information:-

Credit Policy	Increase in collection period	Increase in sales	Present default anticipated
A	10 days	₹ 30,000	1.5%
B	20 days	₹ 48,000	2%
C	30 days	₹ 75,000	3%
D	45 days	₹ 90,000	4%

The selling price per unit is ₹3. Average cost per unit is ₹2.25 and variable costs per unit are ₹ 2. The current bad debt loss is 1%. Required return on additional investment is 20%. Assume a 360 days year.

ANALYSE which of the above policies would you recommend for adoption?

SOLUTION

A.   Statement showing the Evaluation of Debtors Policies (Total Approach)

Particulars		Present Policy 30 days	Proposed Policy A 40 days	Proposed Policy B 50 days	Proposed Policy C 60 days	Proposed Policy D 75 days
		₹	₹	₹	₹	₹
A.	**Expected Profit:**					
	(a) Credit Sales	6,00,000	6,30,000	6,48,000	6,75,000	6,90,000
	(b) Total Cost other than Bad Debts					

(i) Variable Costs [Sales × 2/ 3]	4,00,000	4,20,000	4,32,000	4,50,000	4,60,000
(ii) Fixed Costs	50,000	50,000	50,000	50,000	50,000
	4,50,000	4,70,000	4,82,000	5,00,000	5,10,000
(c) Bad Debts	6,000	9,450	12,960	20,250	27,600
(d) Expected Profit [(a) − (b) − (c)]	1,44,000	1,50,550	1,53,040	1,54,750	1,52,400
B. Opportunity Cost of Investments in Receivables	7,500	10,444	13,389	16,667	21,250
C. Net Benefits (A − B)	1,36,500	1,40,106	1,39,651	1,38,083	1,31,150

Recommendation: The Proposed Policy A (i.e. increase in collection period by 10 days or total 40 days) should be adopted since the net benefits under this policy are higher as compared to other policies.

Working Notes:

(i)   **Calculation of Fixed Cost** = [Average Cost per unit – Variable Cost per unit] × No. of Units sold

$$= [₹ 2.25 - ₹ 2.00] × (₹ 6,00,000/3)$$

$$= ₹ 0.25 × 2,00,000 = ₹ 50,000$$

(ii)   **Calculation of Opportunity Cost of Average Investments**

Opportunity Cost = Total Cost $\times \dfrac{\text{Collection period}}{360} \times \dfrac{\text{Rate of Return}}{100}$

Present Policy $= 4,50,000 \times \dfrac{30}{360} \times \dfrac{20}{100} = 7,500$

Policy A $= 4,70,000 \times \dfrac{40}{360} \times \dfrac{20}{100} = 10,444$

Policy B $= 4,82,000 \times \dfrac{50}{360} \times \dfrac{20}{100} = 13,389$

Policy C $= 5,00,000 \times \dfrac{60}{360} \times \dfrac{20}{100} = 16,667$

Policy D = $5,10,000 \times \dfrac{75}{360} \times \dfrac{20}{100} = 21,250$

B.   Another method of solving the problem is **Incremental Approach**. Here we assume that sales are all credit sales.

Particulars		Present Policy 30 days	Proposed Policy A 40 days	Proposed Policy B 50 days	Proposed Policy C 60 days	Proposed Policy D 75 days
		₹	₹	₹	₹	₹
A.	**Incremental Expected Profit:**					
	(a) Incremental Credit Sales	0	30,000	48,000	75,000	90,000
	(b) Incremental Costs					
	(i) Variable Costs	4,00,000	20,000	32,000	50,000	60,000
	(ii) Fixed Costs	50,000	-	-	-	-
	(c) Incremental Bad Debt Losses	6,000	3,450	6,960	14,250	21,600
	(d) Incremental Expected Profit (a – b –c)]		**6,550**	**9,040**	**10,750**	**8,400**
B.	**Required Return on Incremental Investments:**					
	(a) Cost of Credit Sales	4,50,000	4,70,000	4,82,000	5,00,000	5,10,000
	(b) Collection period	30	40	50	60	75
	(c) Investment in Receivable (a × b/360)	37,500	52,222	66,944	83,333	1,06,250
	(d) Incremental Investment in Receivables	-	14,722	29,444	45,833	68,750
	(e) Required Rate of		20	20	20	20

	Return (in %)					
	(f) Required Return on Incremental Investments (d × e)	-	2,944	5,889	9,167	13,750
C.	**Net Benefits (A – B)**	-	3,606	3,151	1,583	5,350

Recommendation: The Proposed Policy A should be adopted since the net benefits under this policy are higher than those under other policies.

C. Another method of solving the problem is by computing the **Expected Rate of Return**.

$$\text{Expected Rate of Return} = \frac{\text{Incremental Expected Profit}}{\text{Incremental Investment in Receivables}} \times 100$$

For Policy A $\quad = \dfrac{₹\,6,550}{₹\,14,722} \times 100 = 44.49\%$

For Policy B $\quad = \dfrac{₹\,9,040}{₹\,29,444} \times 100 = 30.70\%$

For Policy C $\quad = \dfrac{₹\,10,750}{₹\,45,833} \times 100 = 23.45\%$

For Policy D $\quad = \dfrac{₹\,8,400}{₹\,68,750} \times 100 = 12.22\%$

Recommendation: The Proposed Policy A should be adopted since the Expected Rate of Return (44.49%) is more than the Required Rate of Return (20%) and is highest among the given policies compared.

ILLUSTRATION 16

XYZ Corporation is considering relaxing its present credit policy and is in the process of evaluating two proposed policies. Currently, the firm has annual credit sales of ₹ 50 lakhs and accounts receivable turnover ratio of 4 times a year. The current level of loss due to bad debts is ₹ 1,50,000. The firm is required to give a return of 25% on the investment in new accounts receivables. The company's variable costs are 70% of the selling price. Given the following information, IDENTIFY which is the better option?

(Amount in ₹)

	Present Policy	Policy Option I	Policy Option I
Annual credit sales	*50,00,000*	*60,00,000*	*67,50,000*
Accounts receivable turnover ratio	*4 times*	*3 times*	*2.4 times*
Bad debt losses	*1,50,000*	*3,00,000*	*4,50,000*

SOLUTION

Statement showing the Evaluation of Debtors Policies

	Particulars	Present Policy	Proposed Policy I	Proposed Policy II
		₹	₹	₹
A	**Expected Profit:**			
	(a) Credit Sales	50,00,000	60,00,000	67,50,000
	(b) Total Cost other than Bad Debts:			
	(i) Variable Costs	35,00,000	42,00,000	47,25,000
	(c) Bad Debts	1,50,000	3,00,000	4,50,000
	(d) Expected Profit [(a) – (b) – (c)]	13,50,000	15,00,000	15,75,000
B	**Opportunity Cost of Investments in Receivables**	2,18,750	3,50,000	4,92,188
C	**Net Benefits (A – B)**	11,31,250	11,50,000	10,82,812

Recommendation: The Proposed Policy I should be adopted since the net benefits under this policy are higher as compared to other policies.

Working Note: Calculation of Opportunity Cost of Average Investments

$$\text{Opportunity Cost} = \text{Total Cost} \times \frac{\text{Collection period}}{12} \times \frac{\text{Rate of Return}}{100}$$

Present Policy $= ₹\ 35,00,000 \times 3/12 \times 25\% = ₹\ 2,18,750$

Proposed Policy I $= ₹\ 42,00,000 \times 4/12 \times 25\% = ₹\ 3,50,000$

Proposed Policy II $= ₹\ 47,25,000 \times 5/12 \times 25\% = ₹\ 4,92,188$

🕐 10.20 FINANCING RECEIVABLES

Pledging of accounts receivables and Factoring have emerged as the important sources of financing of accounts receivables now-a-days.

(i)   Pledging: This refers to the use of a firm's receivable to secure a short term loan. A firm's receivables can be termed as its most liquid assets and this serve as prime collateral for a secured loan. The lender scrutinizes the quality of the accounts receivables, selects acceptable accounts, creates a lien on the collateral and fixes the percentage of financing receivables which ranges around 50 to 90%. The major advantage of pledging accounts receivables is the ease and flexibility it provides to the borrower. Moreover, financing is done regularly. This, however, suffers on account of high cost of financing.

(ii)   Factoring: Factoring is a relatively new concept in financing of accounts receivables. This refers to outright sale of accounts receivables to a factor or a financial agency. A factor is a firm that acquires the receivables of other firms. The factoring lays down the conditions of the sale in a factoring agreement. The factoring agency bears the right of collection and services the accounts for a fee.
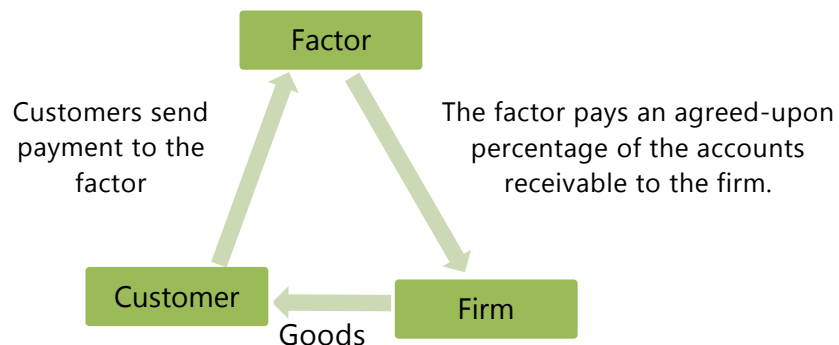
Normally, factoring is the arrangement on a non-recourse basis where in the event of default the loss is borne by the factor. However, in a factoring arrangement with recourse, in such situation, the accounts receivables will be turned back to the firm by the factor for resolution.

There are a number of financial institutions providing factoring services in India. Some commercial banks and other financial agencies provide this service. The biggest advantages of factoring are the immediate conversion of receivables into cash and predicted pattern of cash flows. Financing receivables with the help of factoring can help a company having liquidity without creating a net liability on its financial condition. Besides, factoring is a flexible financial tool providing timely funds, efficient

record keepings and effective management of the collection process. This is not considered to be as a loan. There is no debt repayment, no compromise to balance sheet, no long term agreements or delays associated with other methods of raising capital. Factoring allows the firm to use cash for the growth needs of business.

The basic format of evaluating factoring proposal is given as under:

Statement showing the Evaluation of Factoring Proposal

		Particulars	₹
A.		**Annual Savings (Benefit) on taking Factoring Service**	
		Cost of credit administration saved	....
		Bad debts avoided	....
		Interest saved due to reduction in average collection period (Wherever applicable)	....
		[Cost of Annual Credit Sales × Rate of Interest × (Present Collection Period – New Collection Period)/360* days]	
		Total	....
B.		**Annual Cost of Factoring to the Firm:**	
		Factoring Commission [Annual credit Sales × % of Commission (or calculated annually)]	....
		Interest Charged by Factor on advance (or calculated annually)	....
		[Amount available for advance or (Annual Credit Sales – Factoring Commission – Factoring Reserve)] × $[\dfrac{\text{Collection Period (days)}}{360*} \times \text{Rate of Interest}]$	
		Total	....
C.		**Net Annual Benefits/Cost of Factoring to the Firm:**	
		Rate of Effective Cost of Factoring to the Firm $= \dfrac{\text{Net Annual cost of Factoring}}{\text{Amount available for advance}} \times 100$ or $\dfrac{\text{Net annual Cost of Factoring}}{\text{Advances to be paid}} \times 100$ Advances to be paid = (Amount available for advance – Interest deducted by factor)	....

*1 Year is taken as 360 days

Advise:

1.   The company should avail Factoring services if rate of effective Cost of Factoring to the firm is less than the existing cost of borrowing or if availing services of factoring results in to positive Net Annual Benefits.

2.   The company should not avail Factoring services if the Rate of Effective Cost of Factoring to the Firm is more than the existing cost of borrowing**.**

ILLUSTRATION 17

A Factoring firm has credit sales of ₹ 360 lakhs and its average collection period is 30 days. The financial controller estimates, bad debt losses are around 2% of credit sales. The firm spends ₹ 1,40,000 annually on debtors administration. This cost comprises of telephonic and fax bills along with salaries of staff members. These are the avoidable costs. A Factoring firm has offered to buy the firm's receivables. The factor will charge 1% commission and will pay an advance against receivables on an interest @15% p.a. after withholding 10% as reserve. ANALYSE what should the firm do?

Assume 360 days in a year.

SOLUTION

Working notes:

Average level of receivables = ₹ 360 lakhs × $\dfrac{30}{360}$ = 30 lakhs

Factoring Commission = 1% of ₹ 30,00,000	=	₹ 30,000
Reserve = 10% of ₹ 30,00,000	=	₹ 3,00,000
Total (i)	=	₹ 3,30,000

Thus, the amount available for advance is

Average level of receivables	₹ 30,00,000
Less: Total (i) from above	₹ 3,30,000
(ii)	₹ 26,70,000
Less: Interest @ 15% p.a. for 30 days	₹ 33,375
Net Amount of Advance available.	₹ 26,36,625

Evaluation of Factoring Proposal

	Particulars	₹	₹
A.	**Savings (Benefit) to the firm**		
	Cost of Credit administration	₹ 1,40,000	₹ 1,40,000
	Cost of bad-debt losses	(0.02 × 360 lakhs)	₹ 7,20,000
	Total		₹ 8,60,000
B.	**Cost to the Firm:**		
	Factoring Commission [Annual credit Sales × % of Commission (or calculated annually)]	$₹30,000 \times \dfrac{360}{30}$	₹ 3,60,000
	Interest Charges	$₹33,375 \times \dfrac{360}{30}$	₹ 4,00,500
	Total		₹ 7,60,500
C.	**Net Benefits to the Firm: (A-B)**		₹ 99,500

Advice: Since the savings to the firm exceeds the cost to the firm on account of factoring, therefore, the proposal is acceptable.

10.21 INNOVATIONS IN RECEIVABLE MANAGEMENT

During the recent years, a number of tools, techniques, practices and measures have been invented to increase effectiveness in accounts receivable management.

Following are the major determinants for significant innovations in accounts receivable management and process efficiency.

1. **Re-engineering Receivable Process:** In some of the organizations real cost reductions and performance improvements have been achieved by re-engineering in accounts receivable process. Re-engineering is a fundamental re-think and re-design of business processes by incorporating modern business approaches. The nature of accounts receivables is such that decisions made elsewhere in the organization are likely to affect the level of resources that are expended on the management of accounts receivables.

    The following aspects provide an opportunity to improve the management of accounts receivables:

(a) **Centralisation:** Centralisation of high nature transactions of accounts receivables and payable is one of the practice for better efficiency. This focuses attention on specialized groups for speedy recovery.

(b) **Alternative Payment Strategies:** Alternative payment strategies in addition to traditional practices result into efficiencies in the management of accounts receivables. It is observed that payment of accounts outstanding is likely to be quicker where a number of payment alternatives are made available to customers. Besides, this convenient payment method is a marketing tool that is of benefit in attracting and retaining customers. The following alternative modes of payment may also be used alongwith traditional methods like Cheque Book etc., for making timely payment, added customer service, reducing remittance processing costs and improved cash flows and better debtor turnover.

  (i) **Direct debit:** I.e., authorization for the transfer of funds from the purchaser's bank account.

  (ii) **Integrated Voice Response (IVR):** This system uses human operators and a computer based system to allow customers to make payment over phone. This system has proved to be beneficial in the orgnisations processing a large number of payments regularly.

  (iii) **Collection by a third party:** The payment can be collected by an authorized external firm. The payments can be made by cash, cheque, credit card or Electronic fund transfer. Banks may also be acting as collecting agents of their customers and directly depositing the collections in customers' bank accounts.

  (iv) **Lock Box Processing:** Under this system an outsourced partner captures cheques and invoice data and transmits the file to the client firm for processing in that firm's systems.

  (v) Payments via Internet using fund transfer methods like RTGS, NEFT, IPMS UPIs, App based payment like PayTm, Phone Pe, etc.

(c) **Customer Orientation:** Where individual customers or a group of customers have some strategic importance to the firm a case study approach may be followed to develop good customer relations. A critical study of this group may lead to formation of a strategy for prompt settlement of debt.

2. **Evaluation of Risk:** Risk evaluation is a major component in the establishment of an effective control mechanism. Once risks have been properly assessed controls can be introduced to either contain the risk to an acceptable level or to eliminate them entirely. This also provides an opportunity for removing inefficient practices. This involves a re-think of processes and questioning the way that tasks are performed. This also opens the way for efficiency and effectiveness benefits in the management of accounts receivables.

3. **Use of Latest Technology:** Technological developments now-a-days provides an opportunity for improvement in accounts receivables process. The major innovations available are the integration of systems used in the management of accounts receivables, the automation and the use of e-commerce.

    (a) **E-commerce** refers to the use of computer and electronic telecommunication technologies, particularly on an inter-organisational level, to support trading in goods and services. It uses technologies such as Electronic Data Inter-change (EDI), Electronic Mail, Electronic Funds Transfer (EFT) and Electronic Catalogue Systems to allow the buyer and seller to transact business by exchange of information between computer application systems.

    (b) **Automated Accounts Receivable Management Systems**: Now-a-days all the big companies develop and maintain automated receivable management systems. Manual systems of recording the transactions and managing receivables are not only cumbersome but ultimately costly also. These integrated systems automatically update all the accounting records affected by a transaction. For example, if a transaction of credit sale is to be recorded, the system increases the amount the customer owes to the firm, reduces the inventory for the item purchased, and records the sale. This system of a company allows the application and tracking of receivables and collections, using the automated receivables system allows the company to store important information for an unlimited number of customers and transactions, and accommodate efficient processing of customer payments and adjustments.

4. **Receivable Collection Practices:** The aim of debtors' collection should be to reduce, monitor and control the accounts receivable at the same time maintain customer goodwill. The fundamental rule of sound receivable

management should be to reduce the time lag between the sale and collection. Any delays that lengthen this span causes receivables to unnecessary build up and increase the risk of bad debts. This is equally true for the delays caused by billing and collection procedures as it is for delays caused by the customer.

The following are major receivable collection procedures and practices:

(i)   Issue of Invoice.

(ii)   Open account or open-end credit.

(iii)   Credit terms or time limits.

(iv)   Periodic statements.

(v)   Use of payment incentives and penalties.

(vi)   Record keeping and Continuous Audit.

(vii)   Export Factoring: Factors provide comprehensive credit management, loss protection collection services and provision of working capital to the firms exporting internationally.

(viii) Business Process Outsourcing: This refers to a strategic business tool whereby an outside agency takes over the entire responsibility for managing a business process.

5. **Use of Financial tools/techniques:** The finance manager while managing accounts receivables uses a number of financial tools and techniques. Some of them have been described hereby as follows:

    (i)   Credit analysis: While determining the credit terms, the firm has to evaluate individual customers in respect of their credit worthiness and the possibility of bad debts. For this purpose, the firm has to ascertain credit rating of prospective customers.

    Credit rating: An important task for the finance manager is to rate the various debtors who seek credit facility. This involves decisions regarding individual parties so as to ascertain how much credit can be extended and for how long. In foreign countries specialized agencies are engaged in the task of providing rating information regarding individual parties. Dun and Broad street is one such source.

    The finance manager has to look into the credit-worthiness of a party and sanction credit limit only after he is convinced that the party is

sound. This would involve an analysis of the financial status of the party, its reputation and previous record of meeting commitments.

The credit manager here has to employ a number of sources to obtain credit information. The following are the important sources:

Trade references; Bank references; Credit bureau reports; Past experience; Published financial statements; and Salesman's interview and reports.

Once the credit-worthiness of a client is ascertained, the next question is to set a limit of the credit. In all such enquiries, the credit manager must be discreet and should always have the interest of high sales in view.

(ii) **Decision tree analysis of granting credit:** The decision whether to grant credit or not is a decision involving costs and benefits. When a customer pays, the seller makes profit but when he fails to pay the amount of cost going into the product is also gone. If the relative chances of recovering the dues can be decided it can form a probability distribution of payment or non-payment. If the chances of recovery are 9 out of 10 then probability of recovery is 0.9 and that of default is 0.1.

Credit evaluation of a customer shows that the probability of recovery is 0.9 and that of default is 0.1 the revenue from the order is ₹ 5 lakhs and cost is ₹ 4 lakhs. The decision is whether credit should be granted or not.

The analysis is presented in the following diagram.
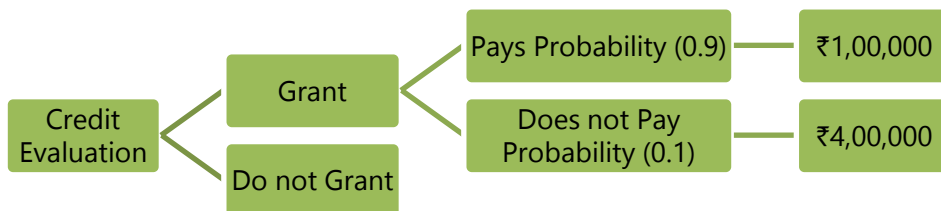
The weighted net benefit is ₹ [1,00,000 × 0.9 i.e. 90,000 – 0.1 × 4,00,000 i.e. 40,000] = 50,000. So credit should be granted.

(iii) **Control of receivables:** Another aspect of management of debtors is the control of receivables. Merely setting of standards and framing a credit policy is not sufficient; it is, equally important to control receivables.

(iv) **Collection policy:** Efficient and timely collection of debtors ensures that the bad debt losses are reduced to the minimum and the average collection period is shorter. If a firm spends more resources on collection of debts, it is likely to have smaller bad debts. Thus, a firm must work out the optimum amount that it should spend on collection of debtors. This involves a trade-off between the level of expenditure on the one hand and decrease in bad debt losses and investment in debtors on the other.

The collection cell of a firm has to work in a manner that it does not create too much resentment amongst the customers. On the other hand, it has to keep the amount of the outstanding in check. Hence, it has to work in a very smoothen manner and diplomatically.

It is important that clear-cut procedures regarding credit collection are set up. Such procedures must answer questions like the following:

(a) How long should a debtor balance be allowed to exist before collection process is started?

(b) What should be the procedure of follow up with defaulting customer? How reminders are to be sent and how should each successive reminder be drafted?

(c) Should there be collection machinery whereby personal calls by company's representatives are made?

(d) What should be the procedure for dealing with doubtful accounts? Is legal action to be instituted? How should account be handled?

🕐 10.22 MONITORING OF RECEIVABLES

(i) **Computation of average age of receivables:** It involves **computation of average collection period.**

(ii) **Ageing Schedule:** When receivables **are analysed according to their age**, the process is known as preparing the ageing schedules of receivables. The computation of average age of receivables is a quick and effective method of comparing the liquidity of receivables with the liquidity of receivables in the past and also comparing liquidity of one firm with the liquidity of the other competitive firm. It also helps the firm to predict collection pattern of receivables in future. This comparison can be made periodically. The purpose of classifying receivables by age groups is to have a closer control over the quality of individual accounts. It requires going back to the receivables ledger where the dates of

each customer's purchases and payments are available. The ageing schedule, by indicating a tendency for old accounts to accumulate, provides a useful supplement to average collection period of receivables/sales analysis. Because an analysis of receivables in terms of associated dates of sales enables the firm to recognise the recent increases, and slumps in sales. To ascertain the condition of receivables for control purposes, it may be considered desirable to compare the current ageing schedule with an earlier ageing schedule in the same firm and also to compare this information with the experience of other firms. The following is an illustration of the ageing schedule of receivables:-

Ageing Schedule

Age Classes (Days)	As on 30th June, 2016			As on 30th September, 2016		
	Month of Sale	Balance of Receivables (₹)	Percentage to total	Month of Sale	Balance of Receivables (₹)	Percentage to total
1-30	June	41,500	11.9	September	1,00,000	22.7
31-60	May	74,200	21.4	August	2,50,000	56.8
61-90	April	1,85,600	53.4	July	48,000	10.9
91-120	March	35,300	10.2	June	40,000	9.1
121 and more	Earlier	10,800	3.1	Earlier	2,000	0.5
		3,47,400	100		4,40,000	100

The above ageing schedule shows a substantial improvement in the liquidity of receivables for the quarter ending September, 2016 as compared with the liquidity of receivables for the quarter ending June, 2016. It could be possible due to greater collection efforts of the firm.

(iii) Collection Programme:

(a) **Monitoring** the state of receivables.

(b) **Intimation** to customers when due date approaches.

(c) **E-mail and telephonic** advice to customers on the due date.

(d) **Reminding** the legal recourse on overdue A/cs.

(e) **Legal action** on overdue A/cs.

The following diagram shows the relationship between collection expenses and bad debt losses which have to be established as initial increase in collection expenses may have only a small impact on bad debt losses.
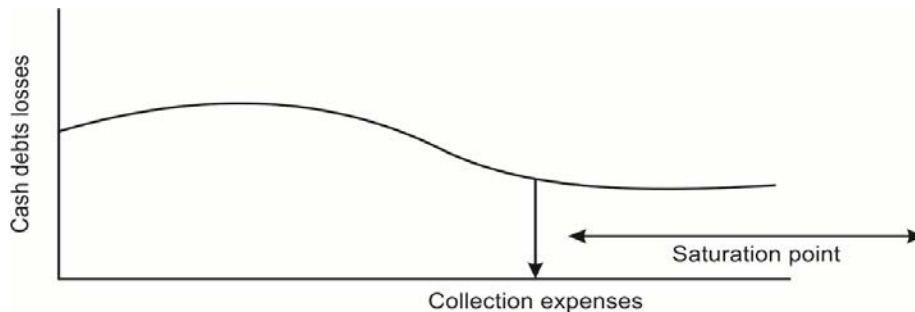
ILLUSTRATION 18

Mosaic Limited has current sales of ₹ 15 lakhs per year. Cost of sales is 75 per cent of sales and bad debts are one per cent of sales. Cost of sales comprises 80 per cent variable costs and 20 per cent fixed costs, while the company's required rate of return is 12 per cent. Mosaic Limited currently allows customers 30 days' credit, but is considering increasing this to 60 days' credit in order to increase sales.

It has been estimated that this change in policy will increase sales by 15 per cent, while bad debts will increase from one per cent to four per cent. It is not expected that the policy change will result in an increase in fixed costs and creditors and stock will be unchanged.

Should Mosaic Limited introduce the proposed policy? ANALYSE (Assume a 360 days year)

SOLUTION

New level of sales will be 15,00,000 × 1.15 = ₹ 17,25,000

Variable costs are 80% × 75% = 60% of sales

Contribution from sales is therefore 40% of sales

Fixed Cost are 20% × 75% = 15% of sales

Particulars	₹	₹
Proposed investment in debtors = Variable Cost + Fixed Cost* = (17,25,000 × 60%) + (15,00,000 × 15%) = $(10,35,000 + 2,25,000) \times \dfrac{60}{360}$		2,10,000
Current investment in debtors = $[(15,00,000 \times 60\%) + (15,00,000 \times 15\%)] \times \dfrac{30}{360}$		93,750
Increase in investment in debtors		1,16,250
Increase in contribution = 15% × 15,00,000 × 40%		90,000
New level of bad debts = (17,25,000 × 4%)	69,000	

Current level of bad debts (15,00,000 × 1%)	15,000	
Increase in bad debts		(54,000)
Additional financing costs = 1,16,250 × 12% =		(13,950)
Savings by introducing change in policy		22,050

* Fixed Cost is taken at existing level in case of proposed investment as well

Advise: Mosaic Limited should introduce the proposed policy.

ILLUSTRATION 19

The Dolce Company purchases raw materials on terms of 2/10, net 30. A review of the company's records by the owner, Mr. Gautam, revealed that payments are usually made 15 days after purchases are made. When asked why the firm did not take advantage of its discounts, the accountant, Mr. Rohit, replied that it cost only 2 per cent for these funds, whereas a bank loan would cost the company 12 per cent.

(a)   ANALYSE what mistake is Rohit making?

(b)   If the firm could not borrow from the bank and was forced to resort to the use of trade credit funds, what suggestion might be made to Rohit that would reduce the annual interest cost? IDENTIFY.

SOLUTION

(a)   Rohit's argument of comparing 2% discount with 12% bank loan rate is not rational as 2% discount can be earned by making payment 5 days in advance i.e. within 10 days rather 15 days as payments are made presently. Whereas 12% bank loan rate is for a year.

Assume that the purchase value is ₹100, the discount can be earned by making payment within 10 days is ₹2. The interest cost on bank loan for 10 days would be ₹0.33 (100 × 12% × 10/365 days). The net benefit of ₹1.67 (2 – 0.33).

(b)   If the bank loan facility could not be available then in this case the company should resort to utilise maximum credit period as possible.

The maximum possible repayment period would be lower of two:

(i)   30 days as allowed by supplier

(ii) $\dfrac{\text{No. of days}}{365 \text{ days}} \times ₹100 \times 12\% = ₹1.67$ Or, No. of days = 50.79 or 51 days

Therefore, payment should be made in 30 days to reduce the interest cost.