**CHAPTER FOUR**

**RECEIVABLE MANAGEMENT**

**Introduction**

Granting credit to the customers is the essential marketing principle, which expands the volume of sales for every business unit. A firm granting credit to its customers does not receive cash immediately for its sales, but creates receivables, that the firm expected to collect in the near future. Receivables constitute a substantial portion in the current assets. The time interval between the date of sale and the date of collection has to be financed out of working capital. Such funds have to arrange from banks or other financing sources that consume additional interest expenses. Thus, the receivables investment represents investment in credit sales that increase profitability on one hand and additional investment cost (interest on additional borrowings both on investment and extended period of repayment). Therefore, finance manager will be anxious to:

1. Establish a credit policy in relation to normal credit period and determine and fix individually the credit limit depending on the credibility of the customers.
2. Develop a system that will control the implementation of credit policy.
3. Prescribe the reporting procedures, which will monitor the efficiency of the system.

A firm is required to consider various aspects of credit customers, approval of credit period, acceptance of sales discounts, provisions regarding the instruments of security for credit to be accepted are a few considerations which need due care and attention like the selection of credit customers can be made on the basis of firms, capacity to absorb the bad debt losses during a given period of time.

The period for which credit is granted to a customer duly brings about increase or decrease in receivables. The shorter the credit period, the lesser is the amount of receivables. As short term credit ties the funds for a short period only. Therefore, a company does not require holding unnecessary investment by way of receivables.

**What is accounts receivable management?**

A company allows its customers to purchase on credit (ie without paying the goods atonce).After some days (credit period) lapse, the customers will settle the accounts accordingto the sales agreement previously fixed.If the customers default on the payments, the company would suffer from bad debts loss.This must be controlled by a strong and flexible ‘Credit Policy’.

What is trade credit?

* Trade credit is credit furnished by a firm’s suppliers.
* Trade credit is often the largest source of short-term credit, especially for small firms.
* Spontaneous, easy to get, but cost can be high.

**Factors Affecting the Size of Receivables:**

The size of receivables is determined by a number of factors for receivables being a major component of current assets. As most of them varies from business to business in accordance with the nature and type of business. Therefore, to discuss all of them would prove irrelevant and time consuming. Some main and common factors determining the level of receivable are presented by way of diagram in figure given below and are discuses below :

* **Stability of Sales** Stability of sales refers to the elements of continuity and consistency in the sales. In other words the seasonal nature of sales violates the continuity of sales in between the year. So, the sale of such a business in a particular season would be large needing a large a size of receivables. Similarly, if a firm supplies goods on installment basis it will require a large investment in receivables.
* **Terms of Sale** A firm may affect its sales either on cash basis or on credit basis. As a matter of fact credit is the soul of a business. It also leads to higher profit level through expansion of sales. The higher the volume of sales made on credit, the higher will be the volume of receivables and vice-versa.
* **The Volume of Credit Sales** It plays the most important role in determination of the level of receivables. As the terms of trade remains more or less similar to most of the industries. So, a firm dealing with a high level of sales will have large volume of receivables.

**Establishment of credit policy**

Any firm’s investment in accounts receivables depends on (a) the volume of credit sales, (b) risk involved in collection; and (c) collection period. Investment in receivables is expressed in terms of costs. The volume of credit sales is a function of firm’s total sales and the percentage of credit sales to total sales. Total sales depend on the market size, firm’s market share, product’s quality, intensity of competition, and economic conditions prevailing in the market environment. Finance manager usually have limited or no control over these variables.

Finance manager can affect the volume of credit sales and collection period and consequently, investment in accounts receivables. This is possible through establishment of ***credit policy,*** retaining the terms of credit under the control of the business.

**Components of Credit Policy**

If a firm decides to grant credit to its customers, then it must establish procedures for extending credit and collecting. In particular, the firm will have to deal with the following components of credit policy:

1. ***Credit standards***: This criterion will decide the type of customer to whom credit can be allowed with the credit limit. Allowing credit to more slow-repaying customer will increase investment in receivables and vice-versa. Increase in investment may result in increase in risk of default (non-collection of debt).
2. ***Credit terms:*** It specifies duration of credit (in time) and terms of payments (discounts) by the customer. Investment in accounts receivables will be high if customers are allowed extended credit period in making payments, and decreases with reduction in credit period. Alternatively offering a discount on early payments by the customer will reduce the investments as well as the credit period. This is also referred as accelerating collection policy.
3. ***Collection efforts:*** Collection efforts will increase the expenses on investment by payment of charges of collection in case of collection done by outsiders, and payroll expenses if done by internal staff. Collection charges will depend on the collection period. Lower the collection period lower will the collection charges and vice-versa.

Any credit policy before implementation has to be evaluated. An evaluation procedure includes three stages. ***The first stage***, of evaluation is the process of identifying incremental revenue a firm may receive with extending the credit. ***The second stage*** is the analysis of additional credit grant to the customers with risk of default. That means extension of credit to the existing customers may increase the bad debt expenses. Therefore incremental revenue with sales should also be analyzed with increment in expenditure as bad debts expenses. Such additional expenses should be deducted from the net returns calculated in stage one. ***The third stage***, increased sales will increase in investment in the accounts receivables, thereby increase the interest expenses on the borrowings. Incremental interest expenses should also be deducted from the incremental revenue calculated from stage one. If the ***net revenue is positive*** then the credit policy established would increase the wealth of the shareholders, and if the ***return is negative***, the shareholders wealth will be decreased. Positive returns will always qualify for acceptance decision while the negative returns will be rejected.

**Elements of Credit Policy**

The success or failure of a business depends primarily on the demand for its products— as a rule, high sales lead to larger profits and a higher stock price. Sales, in turn, depend on a number of factors: some, like the state of the economy, are exogenous, but others are under the firm’s control. The major controllable factors are sales prices, product quality, advertising, and the firm’s credit policy. Credit policy, in turn, consists of the following four variables.

1. **Credit period**: How long to pay? Shorter period reduces Days Sales Outstanding and average Accounts Receivables, but it may discourage sales. A firm might sell on terms of “net 30,” which means that the customer must pay within 30 days.
* Credit period is the duration of time for which trade credit is extended. During this time the overdue amount must be paid by the customers. The credit period lays its multi-faced effect on many aspects the volume of investment in receivables; its indirect influence can be seen on the net worth of the company.
* A long period credit term may increase sales but it‘s also increase investment in receivables and lowers the quality of trade credit. While determining a credit period a company is bound to take into consideration various factors like buyer's rate of stock turnover, competitors approach, the nature of commodity, margin of profit and availability of funds etc.
1. **Discounts**: Attracts new customers and reduces Days sales outstanding. Cash discount on one hand attracts the customers for payments before the lapse of credit period. As a tempting offer of lesser payments is proposed to the customer in this system, if a customer succeeds in paying within the stipulated period. On the other hand reduces the working capital requirements of the concern. Thus, decreasing the receivables management.

If the credit terms are stated as “2/10, net 30,” then buyers may deduct 2% of the purchase price if payment is made within 10 days; otherwise, the full amount must be paid within 30 days. Thus, these terms allow a discount to be taken.

1. **Credit standards**. Tighter standards reduce bad debt losses, but may reduce sales. Fewer bad debts reduce Days sales outstanding. How much financial strength must a customer show to qualify for credit? Lower credit standards boost sales, but they also increase bad debts.
2. **Collection policy**. The policy, practice and procedure adopted by a business enterprise in granting credit, deciding as to the amount of credit and the procedure selected for the collection of the same also greatly influence the level of receivables of a concern. The more lenient or liberal to credit and collection policies the more receivables are required for the purpose of investment. Tougher policy will reduce DSO, but may damage customer relationships. How tough or lax is a company in attempting to collect slow paying accounts? A tough policy may speed up collections, but it might also anger customers and cause them to take their business elsewhere.

The credit manager is responsible for administering the firm’s credit policy. However, because of the pervasive importance of credit, the credit policy itself is normally established by the executive committee, which usually consists of the president plus the vice presidents of finance, marketing, and production.

**Analyzing credit policy**

Receivables management begins with the firm’s credit policy, but a monitoring system is also important to keep tabs on whether the terms of credit are being observed. Corrective action is often needed, and the only way to know whether the situation is getting out of hand is with a good receivables control system

A firm practicing lenient or relatively liberal credit policy its size of receivables will be comparatively large than the firm with more rigid or signet credit policy. A lenient credit policy leads to greater defaults in payments by financially weak customers resulting in bigger volume of receivables. A lenient credit policy encourages the financially sound customers to delay payments again resulting in the increase in the size of receivables.

**Credit Policy Effects**

In evaluating credit policy, there are five basic factors to consider:

1. ***Revenue effects****:* If the firm grants credit, then there will be a delay in revenue collections as some customers take advantage of the credit offered and pay later. However, the firm may be able to charge a higher price if it grants credit and it may be able to increase the quantity sold. Total revenues may thus increase.
2. ***Cost effects****:* Although the firm may experience delayed revenues if it grants credit, it will still incur the costs of sales immediately. Whether the firm sells for cash or credit, it will still have to acquire or produce the merchandise (and pay for it).
3. ***The cost of debt****:* When the firm grants credit, it must arrange to finance the resulting receivables. As a result, the firm’s cost of short-term borrowing is a factor in the decision to grant credit.
4. ***The probability of nonpayment****:* If the firm grants credit, some percentage of the credit buyers will not pay. This can’t happen, of course, if the firm sells for cash.
5. ***The cash discount****:* When the firm offers a cash discount as part of its credit terms, some customers will choose to pay early to take advantage of the discount.

**Evaluating a Proposed Credit Policy**

To illustrate how credit policy can be analyzed, we will start with a relatively simple case.

***Illustration*** : A firm has an investment in the credit sales as $100,000 and the average collection period allowed to the customers as 15 days. Find the amount of investment gained and lost when the return on investment in the business is at 7 percent and borrowings demand an interest at the rate of 4 percent per annum. The firm has a proposal to expand its sales by extending the credit days from 15 days to 30 days. Does the proposal worth accepting when increase in sales is expected as 5 percent? Ignore all other expenses as constant.

**Solution:**

**Existing situation**: Average collection period = 15 days

 Average investment in receivables = $100,000

 Total credit sales = ?

Total credit sales = (Average investment X 360 days) / average collection period.

Therefore total credit sales = ($ 100,000 X 360 days) / 15 days

Total credit sales = $ 2,400,000

**Profitability with the existing situation**:

Return on investment (sales) ............................ $ 2,400,000 X 7 % = $ 168,000

Less: Interest expenses on investment

 Average receivables X 4 % ........................................................... 4,000

Net returns ......................................................................................... **$ 164,000**

**Revision in the credit period:**

Average collection period = 30 days

Total credit sales = $2,400,000 + 5 % on $2,400,000

 = $ 2,520,000

Average investment in receivables = ?

Average receivables = (total credit sales X Average collection period) / 360 days

Average receivables = ($ 2,520,000 X 30 days) / 360 days

Average receivables = $ 210,000

**Profitability with the revised situation**:

Return on investment (sales) ................................. $ 2,520,000 X 7 % = $ 176,400

Less: Interest expenses on investment

 Average receivables X 4 % ................................................................. 8,400

Net returns ............................................................................................... **$ 168,000**

Therefore, increase in the credit period has increased the net returns from $164,000 to $168,000. ***The new proposal is worth accepting.***

**Optimum credit policy**

Investment in credit sales will accumulate costs in the form of ***bad debts losses, collection charges, and interest on additional borrowings.*** An increase in investment in the accounts receivables increases such costs. A reduction in the investment in accounts receivables reduces such costs but also decreases profitability of firms as decrease in receivables means decrease in sales. ***An optimum credit policy*** is one that maximizes value of the firm, by minimizing the associated costs of credit sales and providing a incremental revenue to the business.

Optimum credit policy is a trade-off between the increased profitability and increased cost can be arrived with an efficient credit policy. Optimum credit policy is the point where operating profit is maximum and firms total cost on investment in receivables in minimum

In principle, the optimal amount of credit is determined by the point at which the incremental cash flows from increased sales are exactly equal to the incremental costs of carrying the increase in investment in accounts receivable.

**The Total Credit Cost Curve**

The trade-off between granting credit and not granting credit isn’t hard to identify, but it is difficult to quantify precisely. As a result, we can only describe an optimal credit policy.

It is useful to think of the decision to grant credit in terms of carrying costs and opportunity costs.

***Carrying costs***are the costs associated with granting credit and making an investment in receivables. Carrying costs include the delay in receiving cash (the required return on receivable), the losses from bad debts, and the costs of managing credit and credit collections which consists of the expenses associated with running the credit department.

These three costs will all increase as credit policy is relaxed. If a firm has a very restrictive credit policy, then all of the associated costs will be low. In this case, the firm will have a “shortage” of credit, so there will be an opportunity cost.

**The opportunity cost** is the extra potential profit from credit sales that is lost because credit is refused. This forgone benefit comes from two sources, the increase in quantity sold, *Q*\* minus *Q*, and, potentially, a higher price. The opportunity costs go down as credit policy is relaxed.

 Total Cost

Costs and Benefits

 Optimal amount

 of credit Carring Cost

 Profitability options

 Opportunity cost

 **Amount of credit extend**

The sum of the carrying costs and the opportunity costs of a particular credit policy is called the total **credit cost curve**. As shown in the above figure, there is a point where the total credit cost is minimized. This point corresponds to the optimal amount of credit or, equivalently, the optimal investment in receivables.

If the firm extends more credit than this minimum, the additional net cash flow from new customers will not cover the carrying costs of the investment in receivables. If the level of receivables is below this amount, then the firm is forgoing valuable profit opportunities.

In general, the costs and benefits from extending credit will depend on characteristics of particular firms and industries. All other things being equal, for example, it is likely that firms with (1) excess capacity, (2) low variable operating costs, and (3) repeat customers will extend credit more liberally than other firms.

**Credit Evaluation and Scoring**

There are no magical formulas for assessing the probability that a customer will not pay. In very general terms, the classic **five *C*s of credit** are the basic factors to be evaluated:

1. ***Character****:* The customer’s willingness to meet credit obligations.
2. ***Capacity****:* The customer’s ability to meet credit obligations out of operating cash flows.
3. ***Capital****:* The customer’s financial reserves.
4. ***Collateral****:* An asset pledged in the case of default.
5. ***Conditions****:* General economic conditions in the customer’s line of business.

**Credit scoring** is the process of calculating a numerical rating for a customer based on information collected; credit is then granted or refused based on the result. For example, a firm might rate a customer on a scale of 1 (very poor) to 10 (very good) on each of the five *C*s of credit using all the information available about the customer. A credit score could then be calculated by totaling these ratings. Based on experience, a firm might choose to grant credit only to customers with a score above, say, 30.

Because credit-scoring models and procedures determine who is and who is not creditworthy, it is not surprising that they have been the subject of government regulation. In particular, the kinds of background and demographic information that can be used in the credit decision are limited.

**COLLECTION POLICY**

Collection policy is the final element in credit policy. Collection policy involves monitoring receivables to spot trouble and obtaining payment on past-due accounts.

**Monitoring the Receivables Position**

When a credit sale is made, the following events occur:

1. Inventories are reduced by the cost of goods sold;
2. Accounts receivable are increased by the sales price; and
3. The difference is reported as a profit, which is adjusted for taxes and then added to the previous retained earnings balance.

If the sale is for cash, then the cash from the sale has actually been received by the firm and the scenario just described is completely valid. If the sale is on credit, however, then the firm will not receive the cash from the sale unless and until the account is collected. Firms have been known to encourage “sales” to weak customers in order to report high current profits. This could boost the firm’s stock price—but only for a short time. Eventually, credit losses will lower earnings, at which time the stock price will fall. This is another example of how differences between a firm’s stock price and its intrinsic value can arise, and it is something that security analysts must keep in mind.

An analysis along the lines suggested in the following sections will detect any such questionable practice.

**Days Sales Outstanding (DSO).** How long it takes for account receivable to be cleared(collected). It represent the number of days for which credit sales are locked in with debtors(as account receivables).

 $DSO=\frac{Accounts Receivable x 365}{Credit Sales}$

Suppose Super Sets Inc., a television manufacturer, sells 200,000 television sets a year at a price of $198 each. Assume that all sales are on credit under the terms 2/10, n/30. Finally, assume that 70% of the customers take the discount and pay on Day 10 and that the other 30% pays on Day 30.

Find the DSO?

 **DSO (ACP) = 0.7(10 days) + 0.3(30 days) =16 days**

$Average daily sales=\frac{Annual Sales}{365}=\frac{200,000 x 198}{365}=108,493$

**Receivables =DSO X ADS =16 \* 108,493= $1,735,888**

Note that DSO, or average collection period, is a measure of the average length of time it takes the firm’s customers to pay off their credit purchases.

**Aging Schedules**

An aging schedule breaks down a firm’s receivables by age of account. Aging schedules cannot be constructed from the type of summary data reported in financial statements; rather, they must be developed from the firm’s accounts receivable ledger. However, well-run firms have computerized their accounts receivable records, so it is easy to determine the age of each invoice, to sort electronically by age categories, and thus to generate an aging schedule.

Management should constantly monitor both the DSO and the aging schedule to detect any trends, to see how the firm’s collections experience compares with its credit terms, and to see how effectively the credit department is operating in comparison with other firms in the industry. If the DSO starts to lengthen or the aging schedule begins to show an increasing percentage of past-due accounts, then the credit manager should examine why these changes are occurring.

Although increases in the DSO and the aging schedule are warning signs, this does not necessarily indicate the firm’s credit policy has weakened. If a firm experiences sharp seasonal variations or if it is growing rapidly, then both the aging schedule and the DSO may be distorted. To see this point, note that the DSO is calculated as follows:

**DSO =Accounts receivable**

 **Annual Sales/365**

Receivables at any point in time reflect sales in the past 1 or 2 months, but sales as shown in the denominator are for the past 12 months. Therefore, a seasonal increase in sales will increase the numerator more than the denominator and hence will raise the DSO, even if customers continue to pay just as quickly as before. Similar problems arise with the aging schedule, because if sales are rising then the percentage in the 0–10-day category will be high, and the reverse will occur if sales are falling. Therefore, a change in either the DSO or the aging schedule should be taken as a signal to investigate further; it is not necessarily a sign that the firm’s credit policy has weakened.

**Collection Effort**

A firm usually goes through the following sequence of procedures for customers whose payments are overdue:

1. It sends out a delinquency letter informing the customer of the past-due status of the account.
2. It makes a telephone call to the customer.
3. It employs a collection agency.
4. It takes legal action against the customer.

At times, a firm may refuse to grant additional credit to customers until arrearages are cleared up. This may antagonize a normally good customer, which points to a potential conflict between the collections department and the sales department. In probably the worst case, the customer files for bankruptcy. When this happens, the credit-granting firm is just another unsecured creditor. The firm can simply wait, or it can sell its receivable.