# CHAPTER:- 6

## Analysis of Receivable Management

<table>
<thead>
<tr>
<th>Particular</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>166</td>
</tr>
<tr>
<td>Meaning and definition</td>
<td>166</td>
</tr>
<tr>
<td>Factors affecting the size of receivables</td>
<td>172</td>
</tr>
<tr>
<td>Principal of Credit and Management</td>
<td>175</td>
</tr>
<tr>
<td>Objectives of Credit Management</td>
<td>177</td>
</tr>
<tr>
<td>Aspect of Credit Policy</td>
<td>178</td>
</tr>
<tr>
<td>Determination of Credit Policy</td>
<td>179</td>
</tr>
<tr>
<td>Collection of Accounts Receivables</td>
<td>186</td>
</tr>
<tr>
<td>Types of Collection Efforts</td>
<td>187</td>
</tr>
<tr>
<td>Degree of Collection Efforts</td>
<td>187</td>
</tr>
<tr>
<td>Collection Follow-up System</td>
<td>188</td>
</tr>
<tr>
<td>Credit control</td>
<td>189</td>
</tr>
<tr>
<td>Control of receivable</td>
<td>190</td>
</tr>
<tr>
<td>Payment Pattern Approach</td>
<td>191</td>
</tr>
<tr>
<td>Analysis of Credit Discount Costs</td>
<td>192</td>
</tr>
<tr>
<td>Computation</td>
<td>193</td>
</tr>
<tr>
<td>Receivables Management in selected steel companies in India</td>
<td>193</td>
</tr>
<tr>
<td>Reference</td>
<td>205</td>
</tr>
</tbody>
</table>
INTRODUCTION:

Management of trade credit is commonly known as Management of Receivables. Receivables are one of the three primary components of working capital, the other being inventory and cash, the other being inventory and cash. Receivables occupy second important place after inventories and thereby constitute a substantial portion of current assets in several firms. The capital invested in receivables is almost of the same amount as that invested in cash and inventories. Receivables thus, form about one third of current assets in India. Trade credit is an important market tool. As, it acts like a bridge for mobilization of goods from production to distribution stages in the field of marketing. Receivables provide protection to sales from competitions. It acts no less than a magnet in attracting potential customers to buy the product at terms and conditions favourable to them as well as to the firm. Receivables management demands due consideration not financial executive not only because cost and risk are associated with this investment but also for the reason that each rupee can contribute to firm’s net worth.

MEANING AND DEFINITION:

When goods and services are sold under an agreement permitting the customer to pay for them at a later date, the amount due from the customer is recorded as accounts receivables; So, receivables are assets accounts representing amounts owed to the firm as a result of the credit sale of goods and services in the ordinary course of business. The value of these claims is carried on to the assets side of the balance sheet under titles such as accounts receivable, trade receivables or customer receivables. This term can be defined as "debt owed to the firm by customers arising from sale of goods or services in ordinary course of business." According to Robert N. Anthony, "Accounts receivables are amounts owed to the business enterprise, usually by its customers. Sometimes it is broken down into trade accounts receivables; the former refers to amounts owed by customers, and the latter refers to amounts owed by employees and others".  

Generally, when a concern does not receive cash payment in respect of ordinary sale of its products or services immediately in order to allow them a reasonable period of time to pay for the goods they have received. The firm is said to have granted trade credit. Trade credit thus, gives rise to certain receivables or book debts expected to be collected by the firm in the near future. In other words, sale of goods on credit converts finished goods of a selling firm into receivables or book debts, on their maturity these receivables are realized and cash
is generated. According to prasanna Chandra, "The balance in the receivables accounts would be; average daily credit sales x average collection period." 

The book debts or receivable arising out of credit has three dimensions:

- It involves an element of risk, which should be carefully assessed. Unlike cash sales credit sales are not risk less as the cash payment remains unreceived.
- It is based on economics value. The economic value in goods and services passes to the buyer immediately when the sale is made in return for an equivalent economic value expected by the seller from him to be received later on.
- It implies futurity, as the payment for the goods and services received by the buyer is made by him to the firm on a future date.

The customer who represent the firm’s claim or assets, from whom receivables or book-debts are to be collected in the near future, are known as debtors or trade debtors. A receivable originally comes into existence at the very instance when the sale is affected. But the funds generated as a result of these sales can be of no use until the receivables are actually collected in the normal course of the business. Receivables may be represented by acceptance; bills or notes and the like due from others at an assignable date in the due course of the business. As sale of goods is a contract, receivables too get affected in accordance with the law of contract e.g. Both the parties (buyer and seller) must have the capacity to contract, proper consideration and mutual assent must be present to pass the title of goods and above all contract of sale to be enforceable must be in writing. Moreover, extensive care is needed to be exercised for differentiating true sales from what may appear to be as sales like bailment, sales contracts, consignments etc. Receivables, as are forms of investment in any enterprise manufacturing and selling goods on credit basis, large sums of funds are tied up in trade debtors. Hence, a great deal of careful analysis and proper management is exercised for effective and efficient management of Receivables to ensure a positive contribution towards increase in turnover and profits.

When goods and services are sold under an agreement permitting the customer to pay for them at a later date, the amount due from the customer is recorded as accounts receivables; so, receivables are assets accounts representing amounts owed to the firm as a result of the credit sale of goods and services in the ordinary course of business. The value of these claims is carried on to the assets side of the balance sheet under titles such as accounts receivable, trade receivables or customer receivables. This term can be defined as "debt owed
to the firm by customers arising from sale of goods or services in ordinary course of business."¹ According to Robert N. Anthony, "Accounts receivables are amounts owed to the business enterprise, usually by its customers. Sometimes it is broken down into trade accounts receivables; the former refers to amounts owed by customers, and the latter refers to amounts owed by employees and others".²

Generally, when a concern does not receive cash payment in respect of ordinary sale of its products or services immediately in order to allow them a reasonable period of time to pay for the goods they have received. The firm is said to have granted trade credit. Trade credit thus, gives rise to certain receivables or book debts expected to be collected by the firm in the near future. In other words, sale of goods on credit converts finished goods of a selling firm into receivables or book debts, on their maturity these receivables are realized and cash is generated. According to prasanna Chandra, "The balance in the receivables accounts would be; average daily credit sales x average collection period."³ The book debts or receivable arising out of credit has three dimensions;⁴

- It involves an element of risk, which should be carefully assessed. Unlike cash sales credit sales are not risk less as the cash payment remains unreceived.
- It is based on economics value. The economic value in goods and services passes to the buyer immediately when the sale is made in return for an equivalent economic value expected by the seller from him to be received later on.
- It implies futurity, as the payment for the goods and services received by the buyer is made by him to the firm on a future date.

The customer who represent the firm's claim or assets, from whom receivables or book-debts are to be collected in the near future, are known as debtors or trade debtors. A receivable originally comes into existence at the very instance when the sale is affected. But the funds generated as a result of these ales can be of no use until the receivables are actually collected in the normal course of the business.

Receivables may be represented by acceptance; bills or notes and the like due from others at an assignable date in the due course of the business. As sale of goods is a contract, receivables too get affected in accordance with the law of contract e.g. Both the parties (buyer and seller) must have the capacity to contract, proper consideration and mutual assent must be present to pass the title of goods and above all contract of sale to be enforceable must be in writing. Moreover, extensive care is needed to be exercised for differentiating true sales form what may appear to be as sales like bailment, sales contracts, consignments etc.
Receivables, as are forms of investment in any enterprise manufacturing and selling goods on credit basis, large sums of funds are tied up in trade debtors. Hence, a great deal of careful analysis and proper management is exercised for effective and efficient management of Receivables to ensure a positive contribution towards increase in turnover and profits.

**Instruments Indicating Receivables**

Harry Gross⁴ has suggested three general instruments in a concern that provide proof of receivables relationship. They are briefly discussed below:

**Open Book Account**

This is an entry in the ledger of a creditor, which indicates a credit transaction. It is no evidence of the existences of a debt under the Sales of Goods.

**Negotiable Promissory Note**

It is an unconditional written promise signed by the maker to pay a definite sum of money to the bearer, or to order at a fixed or determinable time. Promissory notes are used while granting an extension of time for collection of receivables, and debtors are unlikely to dishonor its terms.

**Increase in Profit**

As receivables will increase the sales, the sales expansion would favorably raise the marginal contribution proportionately more than the additional costs associated with such an increase. This in turn would ultimately enhance the level of profit of the concern.

**Meeting Competition**

A concern offering sale of goods on credit basis always falls in the top priority list of people willing to buy those goods. Therefore, a firm may resort granting of credit facility to its customers in order to protect sales from losing it to competitors. Receivables acts as an attracting potential customers and retaining the older ones at the same time by weaning them away from the competitors.

**Augment Customer's Resources**

Receivables are valuable to the customers on the ground that it augments their resources. It is favoured particularly by those customers, who find it expensive and cumbersome to borrow from other resources. Thus, not only the present customers but also the Potential creditors are attracted to buy the firm's product at terms and conditions favourable to them.

**Speedy Distribution**
Receivables play a very important role in accelerating the velocity of distributions. As a middleman would act quickly enough in mobilizing his quota of goods from the productions place for distribution without any hassle of immediate cash payment. As, he can pay the full amount after affecting his sales. Similarly, the customers would hurry for purchasing their needful even if they are not in a position to pay cash instantly. It is for these receivables are regarded as a bridge for the movement of goods form production to distributions among the ultimate consumer.

**Figure No.6.1**

*Flow Chart Showing the Purpose Of Maintaing Receivable*

- Start
- Credit Sales
- Maintaining Receivable
  - Retaining Present Customers
  - Attracting Potential Creditors
  - Quick Distribution of goods
  - Potentiality to face Competition
- Expansion of Sales
  - Higher Profit Level
    - More Liquidity
- Stop

**Miscellaneous**

The usual practice companies may resort to credit granting for various other reasons like industrial practice, dealers relationship, status of buyer, customers requirements, transits delay etc. In nutshell, the overall objective of making such commitment of funds in the name of accounts receivables aims at generating a large flow of operating revenue and earning
more than what could be possible in the absence of such commitment. Figure 6.1 further provides an easy explanation to the purpose for which they are maintained.

**Cost of Maintaining Receivables**

Receivables are a type of investment made by a firm. Like other investments, receivables too feature a drawback, which are required to be maintained for long that it known as credit sanction. Credit sanction means tie up of funds with no purpose to solve yet costing certain amount to the firm. Such costs associated with maintaining receivables are detailed below:

1. Administrative Cost

   If a firm liberalizes its credit policy for the good reasons of either maximizing sales or minimizing erosion of sales, it incurs two types of costs:

   **(A) Credit Investigation and Supervision Cost.**

   As a result of lenient credit policy, there happens to be a substantial increase in the number of debtors. As a result the firm is required to analysis and supervises a large volume of accounts at the cost of expenses related with acquiring credit information either through outside specialist agencies or form its own staff.

   **(B) Collection Cost**

   A firm will have to intensify its collection efforts so as to collect the outstanding bills especially in case of customers who are financially less sound. It includes additional expenses of credit department incurred on the creation and maintenance of staff, accounting records, stationary, postage and other related items.

2. Capital Cost

   There is no denying that maintenance of receivables by a firm leads to blockage of its financial resources due to the tie log that exists between the date of sale of goods to the customer and the date of payment made by the customer. But the bitter fact remains that the firm has to make several payments to the employees, suppliers of raw materials and the like even during the period of time lag. As a consequence, a firm is liable to make arrangements for meeting such additional obligations from sources other than sales. Thus, a firm in the course of expanding sales through receivables makes way for additional capital costs.
3. Production and Selling Cost

These costs are directly proportionate to the increase in sales volume. In other words, production and selling cost increase with the very expansion in the quantum of sales. In this respect, a firm confronts two situations; firstly when the sales expansion takes place within the range of existing production capacity, in that case only variable costs relating to the production and sale would increase. Secondly, when the production capacity is added due to expansion of sales in excess of existing production capacity. In such a case incremental production and selling costs would increase both variable and fixed costs.

4. Delinquency Cost

This type of cost arises on account of delay in payment on customer's part or the failure of the customers to make payments of the receivables as and when they fall due after the expiry of the credit period. Such debts are treated as doubtful debts. They involve:

(i) Blocking of firm's funds for an extended period of time,
(ii) Costs associated with the collection of overheads, remainders legal expenses and on initiating other collection efforts.

5. Default Cost

Similar to delinquency cost is default cost. Delinquency cost arises as a result of customers delay in payments of cash or his inability to make the full payment from the firm of the receivables due to him. Default cost emerges a result of complete failure of a defaulter (customer) to pay anything to the firm in return of the goods purchased by him on credit. When despite of all the efforts, the firm fails to realize the amount due to its debtors because of him complete inability to pay for the same. The firm treats such debts as bad debts, which are to be written off, as cannot be recoveries in any case.

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 the 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 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.

Credit Policy
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. It is because of two prominent reasons:

- 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.

**Terms of Sale**
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.

**Cash Discount**
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.

**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.

**Collection Collected**
If an enterprise is efficient enough in encasing the payment attached to the receivables within the stipulated period granted to the customer. Then, it will opt for keeping the level of receivables low. Whereas, enterprise experiencing undue delay in collection of payments will always have to maintain large receivables.

**Bills Discounting and Endorsement**
If the firm opts for discounting its bills, with the bank or endorsing the bills to the third party, for meeting its obligations. In such circumstances, it would lower the level of receivables required in conducting business.

**Quality of Customer**
If a company deals specifically with financially sound and credit worthy customers then it would definitely receive all the payments in due time. As a result the firm can comfortably do with a lesser amount of receivables than in case where a company deals with customers having financially weaker position.
Miscellaneous

There are certain general factors such as price level variations, attitude of management type and nature of business, availability of funds and the lies that play considerably important role in determining the quantum of receivables.

PRINCIPLES OF CREDIT MANAGEMENT:

Joseph L. Wood is of the opinion, "The purpose of any commercial enterprise is the earning of profit, credit in itself is utilized to increase sale, but sales must return a profit." The primary objective of management or receivables should not be limited to expansion of sales but should involve maximization of overall returns on investment. So, receivables management should not be confined to mere collection or receivables within the shortest possible period but is required to focus due attention to the benefit-cost trade-off relating to numerous receivables management.

In order to add profitability, soundness and effectiveness to receivables management, an enterprise must make it a point to follow certain well-established and duly recognized principles of credit management. "The first of these principles relate to the allocation of authority pertaining to credit and collections of some specific management. The second principle puts stress on the selection of proper credit terms. The third principles emphasizes a through credit investigation before a decision on granting a credit is taken. And the last principle touches upon the establishment of sound collection policies and procedures." In the light of this quotation the principles of receivables management can be stated as: -

1. Allocation or Authority

The determination of sound and effective credit collection policies management. The efficiency of a credit management in formulation and exestuation of credit and collection policies largely depends upon the location of credit department in the organizational structure f the concern. The aspect of authority allocation can be viewed under two concepts. As per the first concept, it is placed under the direct responsibility of chief finance officer for it being a function primarily financed by nature. Further, credit and collection policies lay direct influence on the solvency of the firm. "For these reasons the credit and collection function should be placed under the direct supervision of the individuals who are responsible for the firm's financial position." "There are other who suggest that business firms should strictly enforce upon their sales departments the principles that sales are insolate until the
value thereof is realized. Those favoring this aspect plead to place the authority of allocation under the direct charge of the marketing executive or the sales department. To conclude "the reasonability to administer credit and collections policies may be assigned either to a financial executive or to a marketing executive or to both of them jointly depending upon the organizational structure and the objectives of the firm."

2. Selection of Proper Credit Terms

The receivables management of an enterprise is required to determine the terms and conditions on the basis of which trade credit can be sanctioned to the customers are of vital importance for an enterprise. As the nature of the credit policy of an enterprise is decided on the basis of components of credit policy. These components include; credit period, cash discount and cash discount period. In practice, the credit policy of firms, vary within the range of lenient and stringent. A firm that tends to grant long period credits and its debtors include even those customers whose financial position is doubtful. Such a firm is said to be following lenient credit policy. Contrary to this, a firm providing credit sales for a relatively short period of time that too on highly selective basis only to those customers who are financially strong and have proven their credit worthiness is said to be following stringent credit policy.

3. Credit Investigation

A firm if desires to maintain effective and efficient receivables management of receivables must undertake a thorough investigation before deciding to grant credit to a customer. The investigation is required to be carried on with respect to the credit worthiness and financial soundness of the debtors, so as to prevent the receivables for falling into the category of bad debts later on at the time of collection. Credit investigation is not only carried on beforehand. But in the case of firms practicing liberal credit policy such investigation may be required to be conducted when a debtors fails to make payments of receivables due on him even after the expiry of credit sale so as to save doubtful debts from becoming bad debts.

4. Sound Collection Policies and Procedures

Receivables management is linked with a good degree of risk. As a few debtors are slow payers and some are non-payers. How-so-ever efficient and effective a receivables management may be the element of risk cannot be avoided altogether but can be minimized to a great extent, it is for this reason the essence of sound collection policies and procedures arises. A sound collection policy aims at accelerating collection form slow payer and
reducing bad debts losses. As a good collection polices ensures prompt and regular collection by adopting collection procedures in a clear-cut sequence.

**OBJECTIVES OF CREDIT MANAGEMENT:**

The objective of receivables management is to promote sales and profit until that is reached where the return on investment in further finding of receivable is less than the cost of funds raised to finance that additional credit (i.e., cost of capital). The primary aim of receivables management is in minimizing the value of the firm while maintaining a reasonable balance between risk (in the form of liquidity) and profitability. The main purpose of maintain receivables is not sales maximization not is for minimization of risk involved by way of bad debts. Had the main objective being growth of sales, the concern, would have opened credit sales for all sort of customers. Contrary to this, if the aim had been minimization of risk of bad debts, the firm would not have made any credit sale at all. That means a firm should indulge in sales expansion by way of receivables only until the extent to which the risk remains within an acceptably manageable limit.

All in all, the basic target of management of receivables is to enhance the overall return on the optimum level of investment made by the firm in receivables. The optimum investment is determined by comparing the benefits to be derived from a particular level of investment with the cost of maintaining that level. The costs involve not only the funds tied up in receivables, but also losses from accounts that do not pay. The latter arises from extending credit too leniently.

A brief inference of objectives of management of receivables may be given as under:

- To attain not maximum possible but optimum volume of sales.
- To exercise control over the cost of credit and maintain it on a minimum possible level.
- To keep investments at an optimum level in the form or receivables.
- To plan and maintain a short average collection period.

Granting of credit and its proper and effective management is not possible without involvement of any cost. These costs are credit administrative expenses bad debts losses, opportunity costs etc. As mentioned before these costs cannot be possibly eliminated altogether but should essentially be regulated and controlled. Elimination of such costs simply mean reducing the cost of zero i.e. no credit grant is permitted to the debtors. In that case firm would no doubt escape form incurring there costs yet the other face of coin would reflect that the profits foregone on account of expected rise in sales volume made on credit
amounts much more than the costs eliminated. Thus, a firm would fail to materialize the objective of increasing overall return of investment. The period goal of receivables management is to strike a golden mean among risk, liquidity and profitability turns out to be effective marketing tool. As it helps in capturing sales volume by winning new customers besides retaining to old ones.

**ASPECT OF CREDIT POLICY:**

The discharge of the credit function in a company embraces a number of activities for which the policies have to be clearly laid down. Such a step will ensure consistency in credit decisions and actions. A credit policy thus, establishes guidelines that govern grant or reject credit to a customer, what should be the level of credit granted to a customer etc. A credit policy can be said to have a direct effect on the volume of investment a company desires to make in receivables.

A company falls prey of many factors pertaining to its credit policy. In addition to specific industrial attributes like the trend of industry, pattern of demand, pace of technology changes, factors like financial strength of a company, marketing organization, growth of its product etc. also influence the credit policy of an enterprise. Certain considerations demand greater attention while formulating the credit policy like a product of lower price should be sold to customer bearing greater credit risk. Credit of smaller amounts results, in greater turnover of credit collection. New customers should be least favored for large credit sales. The profit margin of a company has direct relationship with the degree or risk. They are said to be inter-woven. Since, every increase in profit margin would be counterbalanced by increase in the element of risk. As observed by Harry Gross, "Two very important considerations involved in incurring additional credit risk are: the market for a company's product and its capacity to satisfy that market. If the demand for the seller's product is greater than its capacity to produce, then it would be more selective in granting credit to its customers. Conversely, if the supply of the product exceeds the demand, the seller would be more likely to lower credit standards with resulting greater risk."¹⁰ Such a conditions would appear in case of a company having excess capacity coupled with high profitability and increased sales volume.

Credit policy of every company is at large influenced by two conflicting objectives irrespective of the native and type of company. They are liquidity and profitability. Liquidity can be directly linked to book debts. Liquidity position of a firm can be easily improved without affecting profitability by reducing the duration of the period for which the credit is
granted and further by collecting the realized value of receivables as soon as they fail due. To improve profitability one can resort to lenient credit policy as a booster of sales, but the implications are:

1. Changes of extending credit to those with weak credit rating.
2. Unduly long credit terms.
3. Tendency to expand credit to suit customer's needs; and
4. Lack of attention to overdue accounts.

**DETERMINATION OF CREDIT POLICY:**

The evaluation of a change in a firm's credit policy involves analysis of:

1. Opportunity cost of lost contribution.
2. Credit administration cost and risk of bad-debt losses.

Above Figure shows that contrary relationship that exists between the two costs. If a company adopts stringent credit policy, there occurs considerable reduction in the level of profitability (shown by curve AB) by the liquidity position stands story (represented by CD Curve). However, the firm losses in terms of contribution due to higher opportunity cost resulting form lost sales. Yet, the credit administrative cost & risk of bad debt losses are quite low. Contrary to this, a company resorting to liberal credit policy has it profitability curve AB rising above liquidity curve CD disclosing that its profitability level is quiet high but the problem of liquidity becomes evident as a result of heavy investment in receivables due to increased sales. Besides this, the opportunity costs of such a firm declines as the firm raptures lost contribution. But the credit administrative costs increase as more accounts are to be handled and also there is rise in risk of bad debt losses. The point E in the figure denotes the state of equilibrium between profitability curve (AB) and Liquidity curve (CD) depicting that the operating profits are maximum. So, point E provides the firm with an appropriate credit policy determined by tradeoff between opportunity costs and credit administrative cost and bad debt losses.

As a matter of fact, point E may not necessarily be representative of optimum credit policy. Optimum credit policy does not mean the point at which balance between liquidity and profitability can be maintained. Instead, an optimum credit policy is one that maximizes the firm's is achieved when marginal rate of return i.e. incremental rate of return on investment becomes equal to marginal cost of capital i.e. incremental cost of funds used to
finance the investment. The incremental rate of return is obtained by dividing incremental investment in receivables. While the incremental cost of funds, is the rate of return expected by firm granting the credit. This rate of return is not equal to borrowing rate. As in case of firm following loose credit policy, higher rate of return means higher risk of invest in A/c's receivables due to slow paying and defaulting accounts.

To sum up, in order to achieve the goal of maximizing the value of the firm the evaluation of investment in receivables accounts should involve the following four steps:

1. Estimation of incremental operating profit,
2. Estimation of incremental investment in accounts receivables,
3. Estimation of the incremental rate of return of investment,
4. Comparison of incremental rate of return with the required rate of return.

The reality, it is rather a different task to establish an optimum credit policy as the best combination of variables of credit policy is quite difficult to obtain. The important variables of credit policy should be identified before establishing an optimum credit policy. The three important decisions variables of credit policy are:

1. Credit terms,
2. Credit standards, and
3. Collection policy.

1. Credit Terms

Credit terms refer to the stipulations recognized by the firms for making credit sale of the goods to its buyers. In other words, credit terms literally mean the terms of payments of the receivables. 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. However, a firm may opt for determining the credit terms in accordance with the established practices in the light of its needs. The amount of funds tied up in the receivables is directly related to the limits of credit granted to customers. These limits should never be ascertained on the basis of the subjects own requirements, they should be based upon the debt paying power of customers and his ledger
record of the orders and payments. There are two important components of credit terms which are detailed below:-

(A) Credit period and
(B) Cash discount terms

(A) Credit period
According to Martin H. Seiden, "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 boost 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.

The period of credit diners form industry to industry. In practice, the firms of same industry grant varied credit period to different individuals. as most of such firms decide upon the period of credit to be allowed to a customer on the basis of his financial position in addition to the nature of commodity, quality involved in transaction, the difference in the economic status of customer that may considerably influence the credit period.

The general way of expressing credit period of a firm is to coin it in terms of net date that is, if a firm's credit terms are "Net 30", it means that the customer is expected to repay his credit obligation within 30 days. Generally, a free credit period granted, to pay for the goods purchased on accounts tends to be tailored in relation to the period required for the business and in turn, to resale the goods and to collect payments for them.

A firm may tighten its credit period if it confronts fault cases too often and fears occurrence of bad debt losses. On the other side, it may lengthen the credit period for enhancing operating profit through sales expansion. Anyhow, the net operating profit would increase only if the cost of extending credit period will be less than the incremental operating profit. But the increase in sales alone with extended credit period would increase the investment in receivables too because of the following two reasons: -

(i) Incremental sales result into incremental receivables,
(ii) The average collection period will get extended, as the customers will be granted more time to repay credit obligation.
Determining the options credit period, therefore, involves locating the period where marginal profit and increased sales are exactly off set by the cost of carrying the higher amount of accounts receivables.

**B) Cash Discount Terms**

The cash discount is granted by the firm to its debtors, in order to induce them to make the payment earlier than the expiry of credit period allowed to them. Granting discount means reduction in prices entitled to the debtors so as to encourage them for early payment before the time stipulated to the i.e. the credit period. According to Theodore N. Beckman, "Cash discount is a premium on payment of debts before due date and not a compensation for the so called prompt payment." Grant of cash discount beneficial to the debtor is profitable to the creditor as well. A customer of the firm i.e. debtor would be realized from his obligation to pay soon that too at discounted prices. On the other hand, it increases the turnover rate of working capital and enables the creditor firm to operate a greater volume of working capital. It also prevents debtors from using trade credit as a source of working capital.

Cash discount is expressed is a percentage of sales. A cash discount term is accompanied by (a) the rate of cash discount, (b) the cash discount period, and (c) the net credit period. For instance, a credit term may be given as "1/10 Net 30" that mean a debtor is granted 1 percent discount if settles his accounts with the creditor before the tenth day starting from a day after the date of invoice. But in case the debtor does not opt for discount he is bound to terminate his obligation within the credit period of thirty days.

Change in cash discount can either have positive or negative implication and at times both. Any increase in cash discount would directly increase the volume of credits sale. As the cash discount reduces the price of commodity for sale. So, the demand for the product ultimately increase leading to more sales. On the other hand, cash discount lures the debtors for prompt payment so that they can relish the discount facility available to them. This in turn reduces the average collection period and bad debt expenses thereby, bringing about a decline in the level of investment in receivables. Ultimately the profits would increase. Increase in discount rate can negatively affect the profit margin per unit of sale due to reduction of prices. A situation exactly reverse of the one stated above will occur in case of decline in cash discount.
As pointed out by N.K. Agarwal, 'we market out or products through established dealers. If sometimes payment is not received within the credit period, it is just not possible to deny discount as it would spoil business relations.' Yet, the management of business enterprises should always take note of the point that cash discount, as a percentage of invoice prices, must not be high as to have an uneconomic bearing on the financial position of the concern. It should be seen in this connection that terms of sales include net credit period so that cash discount may continue to retain its significance and might be prevented from being treated by the buyers just like quantity discount. To make cash discount an effective tool of credit control, a business enterprise should also see that is allowed to only those customers who make payments at due date. And finally, the credit terms of an enterprise on the receipt of securities while granting credit to its customers. Credit sales may be got secured by being furnished with instruments such as trade acceptance, promissory notes or bank guarantees.

2. Credit Standards

Credit standards refers to the minimum criteria adopted by a firm for the purpose of short listing its customers for extension of credit during a period of time. Credit rating, credit reference, average payments periods a quantitative basis for establishing and enforcing credit standards. The nature of credit standard followed by a firm can be directly linked to changes in sales and receivables. In the opinion of Van Home, "There is the cost of additional investment in receivables, resulting from increased sales and a slower average collection period." A liberal credit standard always tends to push up the sales by luring customers into dealings. The firm, as a consequence would have to expand receivables investment along with sustaining costs of administering credit and bad-debt losses. As a more liberal extension of credit may cause certain customers to the less conscientious in paying their bills on time. Contrary, to these strict credit standards would mean extending credit to financially sound customers only. This saves the firm from bad debt losses and the firm has to spend lesser by a way of administrative credit cost. But, this reduces investment in receivables besides depressing sales. In this way profit sacrificed by the firm on account of losing sales amounts more than the cost saved by the firm.

Prudently, a firm should opt for lowering its credit standard only up to that level where profitability arising through expansion in sales exceeds the various costs associated
with it. That way, optimum credit standards can be determined and maintained by inducing tradeoff between incremental returns and incremental costs.

**Analysis of Customers**

The quality of firm's customers largely depends upon credit standards. The quality of customers can be discussed under too main aspects; average collection period and default rate.

(i) **Average Collection Period:** It is the time taken by customers bearing credit obligation in materializing payment. It is represented in terms of the number of days, for which the credit sales remains outstanding. A longer collection period always enlarges the investment in receivables.

(ii) **Default Rate:** This can be expressed in terms of debt-losses to the proportion of uncontrolled receivables. Default rate signifies the default risk i.e. profitability of customers failure to pay back their credit obligation.

I.M. Pandey has cited three Cs of credit termed as character, capacity and condition that estimate the likelihood of default and its effect on the firms' management credit standards. Two more Cs have been added to the three Cs of I.M. Pandey, namely; capital and collateral. All the five Cs of credit are discussed below in brief.

(iii) **Character:** Character means reputation of debtor for honest and fair dealings. It refers to the free will or desire of a debtor of a firm to pay the amount of receivables within the stipulated time i.e. credit period. In practice, the moral of customer is considered important in valuation of credit. The character of customer losses its importance if the receivable is secured by way of appropriate and adequate security.

(iv) **Capacity:** Capacity refers to the experience of the customers and his demonstratal ability to operate successfully. It is the capacity particularly financial ability of a customer to borrow from other sources in orders discharges his obligations to honors contract of the firm.

(v) **Capital:** Capital refers to the financial standing of a customer. Capital acts as a guarantee of the customers' capacity to pay. But, it should be noted that a customer may be capable of paying by means of borrowing even if his capital holding are scarce.

(vi) **Collateral:** Collaterals are the assets that a customer readily offers to the creditor (i.e. firm granting credit) as a security, which should be possessed by the firm in the event
of non-payment by the customer. A firm should be particular with regards to the real worth of assets offered to it as collateral security

(vii) Conditions: Conditions refer to the prevailing economic and other conditions, which can place their favorable or unfavorable impact on the ability of customer to pay.

A firm must ensure that its customers have completely and accurately furnished with the above stated information. As a matter of precaution a firm should carry out credit investigation on its own level. This involves two basic steps:

- The first step involves obtaining credit information from internal and external source. Internal sources includes filling up various documents (pertaining to the financial details of the credit applicants) and records (that fulfill formalities related with extension of credit) of a concern. The external sources of information are financial statements, bank references, sales representatives' report, past experience of the concern etc.

- The second step involves analysis of credit information obtained in respect of the applicant for deciding the grant of credit as well as its quantum. A concern is free to adopt any procedure that suits its needs and fulfill the desired requirements, as there are no established procedures for analysis of information. But, it must be born in mind that the analysis procedure shall be competent enough to suit both the qualitative and quantitative aspects of the applicant. Qualitative aspect refers to customer's character, goodwill and credit worthiness. While the quantitative aspect is based on the factual information available from the applicants finances statements, his past records and the like factors. As a matter of fact the ultimate decision of credit extension and the volume of credit depend upon the subjective interpretations of his credit standing.

No doubt, credit investigation involves cost. So, it shall be conducts as per the requirements of the situations. But the fact cannot be ignored that a credit decision taken in the absence of adequate and proper investigation to save costs related with such investigation proves much more costly due to bad debts, excessive collection costs etc. Thus, credit investigation is justified on such grounds. A firm can thereby, gainfully empty such information in classifying the customers in accordance with their credit-worthiness and estimate the probable default risk. This shall also be referred to while formulating the credit standards of business enterprises.
3. Collection Policy

Collection policy refers to the procedures adopted by a firm (creditor) to collect the amount of from its debtors when such amount becomes due after the expiry of credit period. R.K. Mishra States, "A collection policy should always emphasize promptness, regulating and systematization in collection efforts. It will have a psychological effect upon the customers, in that; it will make them realize the obligation of the seller towards the obligations granted." The requirements of collection policy arises on account of the defaulters i.e. the customers not making the payments of receivables in time. As a few turnouts to be slow payers and some other non-payers. A collection policy shall be formulated with a whole and sole aim of accelerating collection from bad-debt losses by ensuring prompt and regular collections. Regular collection on one hand indicates collection efficiency through control of bad debts and collection costs as well as by inducing velocity to working capital turnover. On the other hand it keeps debtors alert in respect of prompt payments of their dues. A credit policy is needed to be framed in context of various considerations like short-term operations, determinations of level of authority, control procedures etc. Credit policy of an enterprise shall be reviewed and evaluated periodically and if necessary amendments shall be made to suit the changing requirements of the business. It should be designed in such a way that it co-ordinates activities of concerns departments to achieve the overall objective of the business enterprises. Finally, poor implementation of good credit policy will not produce optimal results.

COLLECTION OF ACCOUNTS RECEIVABLES:

Despite of firm's best precautionary efforts in escaping the bad and doubtful debts, there always exist certain number of unpaid accounts on the due date. Three-well-known causes of failure of such payments on the part of debtors (i.e. firm's customer) can be sited as:

- It may happen at times that the due date of payment slips from debtors mind and he delays in making good the payments at the right time.
- It may incidentally occur at the time of grant of credit that a firm fails to access and interpret the character, capacity, capital, Collateral and conditions correctly and appropriately.
- There may arise a considerable change in the financial position of a debtor after the credit has been granted to him by the firm.
All the above stated reasons compel a firm to formulate a collection programme to obtain recovery or receivables from delinquent account. Such programme may consist of following steps:

- Monitoring the state of receivables,
- Dispatch of letters to customers whose due date is near,
- Telegraphic and telephone advice to customers around the due date,
- Threat of legal action to overdue accounts, and
- Legal actions against overdue accounts.

**TYPES OF COLLECTION EFFORTS:**

A well-established collection policy always attempts at enlisting a clear-cut guidelines in order of a sequence that too in precise terms for collection of overdue from the customers. As a cord of suggestion, the sequence adopted must be capable of bringing effectiveness and efficiency in collection policy. For instance, if the credit period granted to customer lapses but he does not pay. The firm should begin with a polite letter of reminder reflecting demand of payment. This may be followed by telegram or telephone or even a personal visit by firm's representative. After that a firm may proceed for legal action if the amount of receivables will remains unpaid. It should be noted that as an account becomes more and more overdue, the collection efforts becomes more personal and strict. But before initiating any legal action, the financial position of the debtor must be considered. A legal action against a customer, who bears a wear financial condition would be of no good to the firm, instead will cause customers bankruptcy reducing the chance of even a marginal amount of payment. Thus, a concern should face such a situation with patient and try to settle the account by accepting a reduced payment.

**DEGREE OF COLLECTION EFFORTS:**

The efforts on collection policy can be better explained by categorizing the collection efforts of a company as strict, liberal and lenient. Strict collection policy is characterized by debtor's payment on or before the due date. As a result many times debtor benefits himself with cash discount. Whereas, a lenient policy is featured by defaulters in payments of Receivables, forfeiture of cash discount etc. Such customers are often Vied future supplies, charged with interest for the period of default and May even undergo legal action pertaining to the payment of overdue amount.
A rigorous collection policy shortens the average collection period, pulls down sales and bad-debt percentage along with increasing collection expenses. A relaxed collection programme would push up sales and bad-debts percentage, lengthen the average of collection period and reduce collection expenses but enhances credit administrative cost.

A concern must make use of financial default and risk analysis; it is willing to favour liberal credit policy. Similarly, a firm can help being cautious while adopting strict collection policy for, it may offend tie customers forcing them to switch over to the competitors. Between the two extremes of rigorous and soft collection policies, there also exists flexible collection policy, which involves reminding the customers through correspondence before the due date. Optimum collection policy may be achieved by comparing costs and benefits, which will be consistent with the goal of attaining maximum value of the firm.

**COLLECTION FOLLOW-UP SYSTEM:**

The element of regularity is always desired in connection efforts, which primarily depends upon two pre-requisites; the development of suitable system of collection and the establishment of a congenial collection follow-up system.

As far as development and adoption of suitable collection period is concerned, it varies from industry to industry or at times from firm to firm. Therefore a congenial collection follow-up system can be established through various practices. Some of them are mentioned below:

1. **Accounts Receivable Report**
   
   This device is regarded as highly useful in timely collections of receivables from debtors. It makes a successful attempt at keeping a keen eye over almost all outstanding accounts of the firm. Hence, enabling a firm to initiate appropriate and timely measure against defaulters as per the guidelines framed by the collection policy of a concern,

2. **Ledger Plan or Card Tickler System**

   In order to establish a sound collection follow-up system ledger plan of the collection follow-up system is based on the creditor’s ledger record. The card tickler system involves maintenance of cards in the name of each delinquent filed date wise in a proper sequence. The card specifies information regarding the amount, terms due date, collection actions taken so far etc. at length in detail.

3. **Computer and Credit Management**

   Of late the use of computers has also come in vogue for the purpose or credit management. Computer helps a great deal in availing essential up-to-date information. For a
quick access to various sort of information's of all information's previously placed on receivable ledger can be placed on punched cards or tapes. Computer can also provide report on summary of all billings, payments, discount taken, amount still owned etc. In addition taken, amount still owned etc. In addition to this complete report on delinquent accounts can be obtained along with timely and accurate information regarding the five Cs of the customer. Further special reports can be prepared for a particular span of period supplemented with categorization and comparison of customer as well as adopted credit policies.

**CREDIT CONTROL:**
Credit control is a complex process, which costs both time and administrative costs. Broadly, speaking, the function of credit control incorporates the following elements: -

1. Checking customer's credit worthiness.
2. Prompt invoicing and follow up
3. Credit insurance,
4. Financial statements, and
5. Use of electronic data processing equipment.

1. **Checking Customers Credit Worthiness**
   This step relates to applicants ability to pay for the goods or services opted by him. The decision pertaining to credit grant and its volume largely depends upon this assessment. The assessment can be done on the basis of financial soundness, general behavior, past records, business habits and traits. Trade reference, banker's records available with the geriatric etc. are a few of certain elements that provide relevant information for conducting this assessment.

2. **Prompt Invoicing and Follow-up**
   This is an executive action involving prompt issue of invoice and equally close follow-up action. A continuous personal attention is required for reviewing amounts of bills receivables. Methods are selected among the various possible alternatives available to ensure that the time period is minimum between realization of payments and converting it into bank's credit account.

3. **Credit Insurance**
   This point pertains to credit exports. As credit sales does not fall under any credit insurance policy coverage in India. It is export credit guarantee department, which formulates
appropriate rules and issues credit insurance policies for exports on payments of a nominal premium. These facilities are of high importance for credit control of exports.

4. Financial Statements

Financial statement is an important document that presents desirable sources of information to the seller regarding the financial position of customer for credit control. For the companies carrying out seasonal business, interim statements instead of financial statements are preferred. For acquiring authenticated information audited financial statement should be favoured rather than unaudited figures enclosing possibility of fraud.

5. Use of Electronic Data Processing Equipment

In the modern world, the importance of computers cannot be possibly denied. Electronic data processing equipment holds its own individual importance in providing timely and accurate information pertaining to the status of accounts. The computer can provide a vast array of detailed information, previously impractical to obtain that may be useful not only to the credit manager but to other management as well. In addition to processing data the computer can be programmed to make certain routine credit decisions.

CONTROL OF RECEIVABLES:

Control or receivables largely depends upon the system of credit control practiced by a business enterprise. It becomes a part of organization obligation to obtain full and relevant information complete in all respect before deciding upon the right customer for the right amount of credit grant. Whenever an order is placed by an applicant financial position and credit worthiness becomes essential. Only after ensuring the degree of safety an order should be accepted and delivered.

A firm is expected to prepare sales invoice and credit notes as early as possible; side by side it should also ensure that they are dispatched at specified regular intervals for effective control of receivables. It is always considered good on the part of rim it is keep as separate ledger for the accounts of based and doubtful debtors. Such segregation not only helps in easy assessment of the position of bad and doubtful debtors in relation to the total debtor's position. A considerable amount of reduction in debtors can be achieved by offering cash discount to the customers.

Even in case of export sales, segregation of credit sales into separate ledger adds effectiveness to control of receivables. Sometimes large contracts, payable by installments, involve credit for several years. The price fixed in these cases should be sufficiently high not
only to cover export credit insurance, but also to cover a satisfactory rate of interest on the diminishing balances of debt expected to the outstanding during the credit period.

There are two methods of controlling accounts receivables, which are traditional in nature; days sales outstanding and ageing schedule. Though they are popularly used but they suffer from a serious deficiency. Both these methods are based on aggregation of sales and receivables due to which the changes in the pattern of payment cannot be easily detected. In order to overcome this drawback of traditional methods, a firm can make use of payments pattern approach.

**PAYMENT PATTERN APPROACH:**

The payment pattern approach is the key issue in controlling accounts receivables as it focuses on payment behavior. This approach is pioneered by B.R. Stone. 17 W.G. Lewellen and R.W. Johnson. 18 Pattern of payments are expressed mostly in terms of proportions and at times as percentage. In general:

\[
P_i = P_0 + P_1 + P_2 + ... + P_n
\]

Here, \(P_i\) represent the proportion of credit sales paid in \(T\) month and "n" is the payment horizon. And also,

\[
P_0 + P_1 + P_2 + ... + P_n = 1
\]

This is the payment pattern which is related to receivables pattern given as

Where, '\(R_i\)' represent the receivables collected at the end of \(T\) months and 'n-V' denotes the horizon. Aggregation the receivables and payments, we obtain:

\[
R_i = 1 - (P_0 + P_1 + P_2 + ... + P_n + P_i)
\]

A conversion matrix is prepared to show the credit sales in each month relating it to the pattern of collection associated with it.

The payment pattern approach is dependent of sales level. It simply involves matching collections and receivables to sales in the month or origin. As a result this approach is free from the limitation observed in traditional methods. Moreover, this method is capable of presenting payment pattern on monthly basis as against combined sales and payment patterns. The main drawback, which we come across in this method, is that conversion matrix cannot be prepared only on the basis of published financial statements like traditional
methods; it also requires internal financial data. Still payment pattern does not require as much data as required in case of ageing schedule method.

**ANALYSIS OF CREDIT DISCOUNT COSTS:**

This analysis holds its own distinct utility for buyers and sellers. The main purpose of conducting this analysis is to have a fair idea about the amount of financial cost that will be borne by:

(i) The seller, while granting such discount if the customer pays within the discount period allowed to him.

(ii) The customer, in case he fails to make good the advantage of discount available to him.

Harry Gross has presented at length some selected credit terms and their equivalent effective annual interest rates suggesting the costs expected to be forgone by neglecting to pay within the stipulated discount period. The table 6.1 illustrates those terms and annual interest rates:

<table>
<thead>
<tr>
<th>Credit Terms</th>
<th>Effective Per Annum Interest Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 % 10 Days Net 30  Days</td>
<td>9%</td>
</tr>
<tr>
<td>1% 10 Days Net 30     Days</td>
<td>18%</td>
</tr>
<tr>
<td>2% 10 Days Net 30     Days</td>
<td>36%</td>
</tr>
<tr>
<td>2% 10 Days Net 60     Days</td>
<td>14%</td>
</tr>
<tr>
<td>2% 30 Days Net 60     Days</td>
<td>24%</td>
</tr>
<tr>
<td>2% 30 Days Net 120    Days</td>
<td>8%</td>
</tr>
<tr>
<td>3% 10 Days Net 30     Days</td>
<td>54%</td>
</tr>
<tr>
<td>5% 10 Days Net 120    Days</td>
<td>16%</td>
</tr>
<tr>
<td>6% 10 Days Net 60     Days</td>
<td>43%</td>
</tr>
<tr>
<td>8% 10 Days Net 120    Days</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Source: Harry Gross. P.83*
**COMPUTATION:**

The following steps are involved in computation of the effective per annum interest rates applicable on equivalent credit terms:

- Calculate the number of days occurring between the last days of
- Discount period and the end of credit period.
- Divide 360 days by the number of days obtained in step.
- Multiply the above quotient by the rate of discount

For illustration, if credit terms are "8/10 Net 120", then its effective annual interest rate will be:

$$\frac{360 \times 8}{(120-10)100} = 26\% \text{ approximately}$$

**RECEIVABLES MANAGEMENT IN SELECTED STEEL COMPANIES IN INDIA:**

For a successful credit management, it is essential for a firm to formulate its credit and collection policies directed towards the achievement of the objectives of effective use of the capital invested. For evaluating the extent of success attained by firm in their efforts the following criteria have been followed:

1. **Size of Receivables.**
   
   As discussed before in this chapter there are many factors influencing the volume of receivables. But the level of enterprises credit sales is the most important determinant in this respect. Any increase or decrease in the level of sales would bring about proportionate increase or decrease in the magnitude of receivables. An efficient credit control, however, prevents faster growth in receivables vis-a-vis sales. Table 6.2 shows the size of receivables in selected steel companies during 1999-2000 to 2008-09 along with the percentage of receivables to current assets.
Table 6.2
Size of Receivables Of steel Companies in India.
(From 1999-2000 to 2008-2009)

<table>
<thead>
<tr>
<th>company</th>
<th>JSWSL</th>
<th>% of C.A</th>
<th>JS&amp;AL</th>
<th>% of C.A</th>
<th>SAIL</th>
<th>% of C.A</th>
<th>TSL</th>
<th>% of C.A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2000</td>
<td>471.89</td>
<td>72.45</td>
<td>30.53</td>
<td>57.77</td>
<td>2893.38</td>
<td>36.66</td>
<td>1359.45</td>
<td>50.83</td>
</tr>
<tr>
<td>2000-01</td>
<td>440.71</td>
<td>69.02</td>
<td>41.41</td>
<td>64.88</td>
<td>2899.01</td>
<td>35.62</td>
<td>1168.55</td>
<td>44.97</td>
</tr>
<tr>
<td>2001-02</td>
<td>386.94</td>
<td>59.44</td>
<td>39.64</td>
<td>68.83</td>
<td>2330.68</td>
<td>34.02</td>
<td>1168.55</td>
<td>44.97</td>
</tr>
<tr>
<td>2002-03</td>
<td>419.87</td>
<td>57.83</td>
<td>11.59</td>
<td>58.92</td>
<td>2859.49</td>
<td>40.3</td>
<td>1125.9</td>
<td>36.58</td>
</tr>
<tr>
<td>2003-04</td>
<td>627.01</td>
<td>62.65</td>
<td>4.37</td>
<td>68.17</td>
<td>2764.57</td>
<td>34.45</td>
<td>838.92</td>
<td>35.27</td>
</tr>
<tr>
<td>2004-05</td>
<td>911.9</td>
<td>48.27</td>
<td>4.89</td>
<td>89.56</td>
<td>3095.29</td>
<td>21.81</td>
<td>881.73</td>
<td>28.96</td>
</tr>
<tr>
<td>2005-06</td>
<td>1496.61</td>
<td>58.23</td>
<td>6.14</td>
<td>82.22</td>
<td>3132.79</td>
<td>20.18</td>
<td>877.43</td>
<td>25.69</td>
</tr>
<tr>
<td>2006-07</td>
<td>1024.45</td>
<td>41.4</td>
<td>6.8</td>
<td>82.22</td>
<td>3940.43</td>
<td>20.06</td>
<td>939.98</td>
<td>8.53</td>
</tr>
<tr>
<td>2007-08</td>
<td>885.95</td>
<td>28.94</td>
<td>N.A</td>
<td>N.A</td>
<td>5421.04</td>
<td>20.81</td>
<td>913.66</td>
<td>22.58</td>
</tr>
<tr>
<td>AVG.</td>
<td>769.32</td>
<td>52.49</td>
<td>18.17</td>
<td>71.78</td>
<td>3508.75</td>
<td>28.08</td>
<td>1104.91</td>
<td>32.84</td>
</tr>
<tr>
<td>S.D</td>
<td>362.07</td>
<td>15.8</td>
<td>16.21</td>
<td>32.05</td>
<td>1168.86</td>
<td>8.82</td>
<td>252.77</td>
<td>13.97</td>
</tr>
<tr>
<td>max</td>
<td>1496.61</td>
<td>72.45</td>
<td>41.41</td>
<td>89.56</td>
<td>5750.85</td>
<td>40.3</td>
<td>1487.42</td>
<td>52.69</td>
</tr>
<tr>
<td>min</td>
<td>386.94</td>
<td>26.67</td>
<td>4.37</td>
<td>57.77</td>
<td>2330.68</td>
<td>16.9</td>
<td>838.92</td>
<td>8.53</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009

The size of receivable of all the steel companies shows fluctuating trend throughout study period. The minimum size of receivable in JSWSL is 386.94 (2001-02), JS&AL is 4.37 (2003-04), SAIL is 2330.68 (2001-02), and TSL is 838.92 (2003-0407). The maximum size of receivable in JSWSL is 1496.61 (2000-01), JS&AL is 41.41 (2003-04), SAIL is 5750.85 (2008-09), and TSL is 1487.4. The study of the composition of receivable is a very important tool to evaluate the management of receivables. It assists to show the point where receivables are concentrated most.

The receivable to current assets of all the steel companies shows fluctuating trend throughout study period. The minimum size of receivable to current assets in JSWSL is 26.67 (2008-09), JS&AL is 57.77 (1999-2000), SAIL is 16.9 (2008-09), and TSL is 8.53 (2006-07). The maximum size of receivable to current assets in JSWSL is 72.45 (1999-2000), JS&AL is 89.56 (2004-05), SAIL is 40.3 (2008-09), and TSL is 52.69 in (2000-01). The study of the composition of receivable to current assets is a very important tool to evaluate the management of receivables. It assists to show the point where receivables are concentrated most.
2. Growth in Average Annual Sales and Receivables.

Indexes of sales and receivables for a length of time discloses certain facts with regards to the credit policy adopted by an enterprise e.g. If sales observe an upward trend with downward trend of debtors, it shows that the firms credit policy is capable of stimulating sales. But a condition contrary to this would have unfavorable effect both on sales and operating profits. Where as if there is upward trend both sale and receivables, it indicates that credit terms are liberal which have induced existing customers to purchase more besides attracting new customers resulting in increased sales and receivables. Under such circumstance there is possibility that receivables may grow faster than sales. This disproportionate growth in receivables results in loss rather than profit, due to inclusion of debtors of low and suspected credit standing. Table 6.3 shows the growth in annual sales and receivables in selected steel companies during 1999-2000 to 2008-09 along with the indices.

<table>
<thead>
<tr>
<th>company</th>
<th>JSWSL</th>
<th>JS&amp;AL</th>
<th>SAIL</th>
<th>TSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>year</td>
<td>indices of receivable</td>
<td>indices of receivable</td>
<td>indices of receivable</td>
<td>indices of receivable</td>
</tr>
<tr>
<td>AVG</td>
<td>163.03</td>
<td>660.91</td>
<td>59.52</td>
<td>260.29</td>
</tr>
<tr>
<td>S.D</td>
<td>76.73</td>
<td>529.13</td>
<td>53.11</td>
<td>228.67</td>
</tr>
<tr>
<td>max</td>
<td>317.15</td>
<td>1627.73</td>
<td>135.64</td>
<td>581.66</td>
</tr>
<tr>
<td>min</td>
<td>82.00</td>
<td>100.00</td>
<td>14.31</td>
<td>12.95</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009

The table reveals that there was an upward trend both sales and receivable of JSWSL during the study period. The average of sales indices (660.91) and receivables indices (163.03) indicates that the sales grow faster than receivables, which indicates that credit
terms are less liberal. The sales had increasing trend throughout the study period while receivable also indicates increasing trend having some fluctuations. In the beginning of study period the receivable grow faster than sales but at the end of the study period the sales grow faster than receivables which show that the JS&AL’s credit policy is capable of stimulating sales. An increasing trend can also be observed in the values of both sales and receivable of SAIL during study period but the receivables grow faster than sales. This disproportionate growth in receivables result in loss rather than profit due to inclusion of debtors of low and suspected credit standing. There was an upward trend both sales and receivable of SAIL during the study period. The average of sales indices (177.74) and receivables indices (121.27) indicates that the sales grow faster than receivables, which indicates that credit terms are less liberal. There was a downward trend both sales and receivable of SAIL during the study period. The average of sales indices of TSL (234.65) and receivables indices (81.28) indicates that the sales grow faster than receivables, which indicates that credit terms are less liberal.

3. Composition of Receivables.

This study of components or receivables is considered as a vital tool for solving purpose of evaluation of management of receivables. Composition of centralization or contraction of receivables. A careful comparison of these points with the size of receivables enables us to apprehend the efficiency or inefficiency of the receivables management. The receivables of steel Industry under the present study are bifurcated into two main heads; trade debtors and loans and advances as given below:

(A) Sundry Debtors

<table>
<thead>
<tr>
<th>Size of Debtors</th>
<th>J S W Steel Ltd.</th>
<th>Jindal Steel &amp; Alloys Ltd.</th>
<th>Steel Authority Of India Ltd.</th>
<th>Tata Steel Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio</td>
<td>Debitors in Rs.</td>
<td>% of C.A</td>
<td>Debitors in Rs.</td>
<td>% of C.A</td>
</tr>
<tr>
<td>1999-2000</td>
<td>236.4</td>
<td>36.3</td>
<td>26.8</td>
<td>50.6</td>
</tr>
<tr>
<td>2000-01</td>
<td>278.3</td>
<td>43.6</td>
<td>36.3</td>
<td>56.9</td>
</tr>
<tr>
<td>2001-02</td>
<td>256.9</td>
<td>39.5</td>
<td>26.1</td>
<td>45.3</td>
</tr>
<tr>
<td>2002-03</td>
<td>279.6</td>
<td>38.5</td>
<td>6.2</td>
<td>31.6</td>
</tr>
<tr>
<td>2003-04</td>
<td>406.7</td>
<td>40.6</td>
<td>0.6</td>
<td>10.0</td>
</tr>
<tr>
<td>2004-05</td>
<td>266.6</td>
<td>14.1</td>
<td>0.1</td>
<td>2.2</td>
</tr>
<tr>
<td>2005-06</td>
<td>241.3</td>
<td>9.4</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>2006-07</td>
<td>245.2</td>
<td>9.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
The table indicates that in J S W Steel Ltd. sundry debtors tend to be fluctuating throughout the study period. The size of debtors ranged between Rs. 406.7 CRORES and Rs. 236.4 CRORES. On an average debtors formed only 025.3% of the current assets. In Jindal Steel & Alloys Ltd. the amount of debtors shows a decreasing trend having some fluctuations. Sundry debtors were Rs. 26.8 crores in 1999-2000 which decreased to Rs. 0.6 crores in 2003-04 and it was 3.7 crores in the last years of study period. The range of percentage of debtors to current assets had been lowest of 0.00% and the highest of 36.3%. In Steel Authority Of India Ltd. we can observe a fluctuating and increasing trend of size of debtors during the period of study. It ranged between Rs. 3048.1 crores and Rs. 1389.4 crores. The percentage of debtors to current assets had declined in 2003-04 and 2004-05 despite rise in the volume of debtors. This discloses the fact that though the size of debtors had increased but the increase in the size of current assets had been more than that of debtors. Debtors in Steel Authority Of India Ltd constituted only 16.5% of current assets. Tata Steel Ltd. Showed decreasing trend with an average of Rs. 807.8 crores and standard deviation was Rs. 285.6 crores. The debtor ranged between Rs. 1279.3 and Rs. 539.4. The debtors are 25.4% of current assets.

In nutshell, we can conclude that the steel companies had been conservative in nature as they tend to avoid risk factor as much as possible. The percentage of debtors to current assets was the lowest in case of Steel Authority Of India Ltd. followed by J S W Steel Ltd., Jindal Steel & Alloys Ltd. and Tata Steel Ltd.

(B) Loans and Advances

Table 6.4 displays the size of loans and advances in the selected steel companies during 1999-2000 to 2008-09. A long with the trend percentage to provide objective analysis of the data.
Table 6.5
Size Of Loans And Advances Of Steel Companies In India.
(From 1999-2000 To 2008-2009)

(Rs. In crores)

<table>
<thead>
<tr>
<th>company</th>
<th>JSWSL</th>
<th>JS&amp;AL</th>
<th>SAIL</th>
<th>TSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>year</td>
<td>loan</td>
<td>indices</td>
<td>loan</td>
<td>indices</td>
</tr>
<tr>
<td></td>
<td>advances</td>
<td>of Loan &amp; advances</td>
<td>advances</td>
<td>of Loan &amp; advances</td>
</tr>
<tr>
<td>1999-2000</td>
<td>3.7</td>
<td>100.0</td>
<td>1.7</td>
<td>100.0</td>
</tr>
<tr>
<td>2000-01</td>
<td>0.6</td>
<td>16.9</td>
<td>1.7</td>
<td>101.8</td>
</tr>
<tr>
<td>2001-02</td>
<td>91.3</td>
<td>2493.7</td>
<td>1.7</td>
<td>101.8</td>
</tr>
<tr>
<td>2002-03</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2003-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2004-05</td>
<td>0.6</td>
<td>15.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2005-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2006-07</td>
<td>3.5</td>
<td>96.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2007-08</td>
<td>14.5</td>
<td>395.9</td>
<td>N.A</td>
<td>N.A</td>
</tr>
<tr>
<td>2008-09</td>
<td>774.3</td>
<td>21154.9</td>
<td>N.A</td>
<td>441.0</td>
</tr>
<tr>
<td>AVG.</td>
<td>88.84</td>
<td>2427.35</td>
<td>0.63</td>
<td>37.95</td>
</tr>
<tr>
<td>S.D</td>
<td>242.47</td>
<td>6624.91</td>
<td>0.87</td>
<td>48.89</td>
</tr>
<tr>
<td>max</td>
<td>774.27</td>
<td>21154.92</td>
<td>1.70</td>
<td>101.80</td>
</tr>
<tr>
<td>min</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009

It can be seen from the table that JSWSL had a highly fluctuated trend of loans and advances during the study period. The loans and advances were Rs. 3.7 crores in 1999-2000 which increased to Rs. 774.3 crores in 2008-09. The average of indices is 2427.35, showing a healthy increase. JS&AL had also recorded decrease in the volume of loans and advances. The trend remained above 100% for first three years of study period. In SAIL, though the value of loans and advances had observed a continuous increase till 2007-08 (reaching the highest of 441.0 percent). In 2002-03 and 2005-06 the same marginally fell which indicates that SAIL had exercised a reasonable control over the loans and advances. The average of indices during the study period was 96.55percent which shows tremendous decrease. In TSL the loan and advances ranged between Rs. 3926.74 in 2008-09 and Rs. 395.51 in 1999-2000. The trend of loan and advances was increasing during the study period.

It may be concluded that the average of trend percentage of loans and advances in steel companies disclose that all the four companies had increased the volume of their loans and advances.

4. Accounts Receivable Turnover Ratio:
The receivables turnover ratio shows the relationship between sales and accounts receivables of a company. While calculating this ratio some prefer to divide sales by average book debts for the year (the average of book debts at the beginning and at the end of the year) to get a more reliable indicator. It can therefore be calculated as:

\[
\text{Receivables Turnover Ratio} = \frac{\text{Net Sales}}{\text{Average Accounts Receivables}}
\]

Where,
\[
\text{Average Accounts Receivables} = \frac{\text{Opening + Closing Receivables}}{2}
\]

According to Spiller and German, "The turnover of receivables provides information on liquidity of receivables." It indicates the speed or sloweres with which receivables are converted into cash. It also serves as a primary indicator of efficiency in this area of investment." An efficiency of receivables management lies in a higher turnover ratio. The profitability of the firm can be further maximized through prompt collection of receivables.

An increase in the volume of receivables without corresponding increase in the total current assets may cause decrease in the volume of investment in other components of current assets. Jerome and Sidney are of the opinion. "If the investment in inventory is reduced, it may in turn affect total sales and consequently reduce the profits of the firm." but a total opposite of this may happen to be true if the investment in receivables is reduced. Table 6.6 carries the figure of accounts receivables turnover ratio in the selected steel companies during 1999-2000 to 2008-09.
## Table 6.6
Accounts Receivable Turnover Ratio Of Steel Companies In India.
(From 1999-2000 To 2008-2009)
(Ratio In Times)

<table>
<thead>
<tr>
<th>company</th>
<th>JSWSL</th>
<th>JS&amp;AL</th>
<th>SAIL</th>
<th>TSL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ratio in times</td>
<td>indices</td>
<td>ratio in times</td>
<td>indices</td>
</tr>
<tr>
<td>1999-2000</td>
<td>1.97</td>
<td>100.00</td>
<td>1.52</td>
<td>100.00</td>
</tr>
<tr>
<td>2000-01</td>
<td>3.05</td>
<td>155.07</td>
<td>6.51</td>
<td>428.83</td>
</tr>
<tr>
<td>2001-02</td>
<td>5.17</td>
<td>262.44</td>
<td>6.30</td>
<td>414.76</td>
</tr>
<tr>
<td>2002-03</td>
<td>6.64</td>
<td>336.85</td>
<td>16.98</td>
<td>1118.41</td>
</tr>
<tr>
<td>2003-04</td>
<td>5.73</td>
<td>290.70</td>
<td>24.06</td>
<td>1585.10</td>
</tr>
<tr>
<td>2004-05</td>
<td>7.72</td>
<td>391.68</td>
<td>24.06</td>
<td>1585.10</td>
</tr>
<tr>
<td>2005-06</td>
<td>4.54</td>
<td>230.71</td>
<td>0.98</td>
<td>64.38</td>
</tr>
<tr>
<td>2006-07</td>
<td>9.08</td>
<td>460.71</td>
<td>0.95</td>
<td>62.30</td>
</tr>
<tr>
<td>2007-08</td>
<td>14.13</td>
<td>717.27</td>
<td>N.A</td>
<td>N.A</td>
</tr>
<tr>
<td>2008-09</td>
<td>14.72</td>
<td>747.27</td>
<td>N.A</td>
<td>N.A</td>
</tr>
<tr>
<td>AVG.</td>
<td>7.27</td>
<td>369.27</td>
<td>10.17</td>
<td>669.86</td>
</tr>
<tr>
<td>S.D</td>
<td>4.30</td>
<td>218.35</td>
<td>9.83</td>
<td>647.91</td>
</tr>
<tr>
<td>max</td>
<td>14.72</td>
<td>747.27</td>
<td>24.06</td>
<td>1585.10</td>
</tr>
<tr>
<td>min</td>
<td>1.97</td>
<td>100.00</td>
<td>0.95</td>
<td>62.30</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009

It may be observed from the table that the accounts receivables turnover ratio of JSWSL had fluctuated throughout the period of study from 1999-2000 to 2008-09. The ratio was 1.97 times in 1999-2000 which increased to 3.05 times in 2000-01. In 2001-02 the ratio increased to 5.17 times but thereafter it shows increasing trend and increased to 14.72 times in 2008-09 with an average of 7.27. The average of accounts receivable turnover ratio of JS&AL was 10.17 times. JS&AL had produced the best of turnover ratio among the selected steel companies. It ranged between 24.06 times in 2003-04 and 0.95 times in 2006-07. The receivable turnover ratio of SAIL 4.53 times in 1999-2000 and increased to 18.00 times 2004-05 and then it went down to 8.48 times in 2008-09. In SAIL there was a fluctuated trend in accounts receivables turnover ratio during the study period. The average of 8.10 times too discloses a very slow speed with which the company's receivables get converted in cash. The average of indices of accounts receivable turnover ratio worked out at 143.75 showing poor performance during study period. The average ratio was 8.10 times in which showed progressive trend during the study period. The ratio was the highest of 10.34 times and lowest of 5.61 times. The receivable turnover ratio was 4.53 times in 1999-2000 and then
it went high to 14.21 times in 2003-04 and then after it has again gone up to 24.29 times in 2007-08 with an average of 13.98 times.

In nut shell, the accounts receivables turnover ratio during the study period was the highest for TSL followed by JS&AL, SAIL and JSWSL. The TSL displayed very good ratio while the JSWSL recorded proportionately very low turnover ratio.

5. Receivables to Sales Ratio

Another method of analyzing the level of investment in receivables is proportion of accounts receivables to sales. This ratio holds considerable importance in indicating the credit and collection policy adopted by a company. A higher ratio indicates greater investment in receivables and slackness in credit collection policies. While a lower ratio points out that a company is practicing strict credit and collection policy resulting in effective receivables management control. Table 6.5 shows the figures indicating receivables to sales ratio in selected steel companies during 1999-2000 to 2008-09.

Table 6.7
Receivable to Sales Ratio Of steel Companies in India.
(From 1999-2000 to 2008-2009)

<table>
<thead>
<tr>
<th>company</th>
<th>JSWSL</th>
<th>JS&amp;AL</th>
<th>SAIL</th>
<th>TSL</th>
<th>JSWSL</th>
<th>JS&amp;AL</th>
<th>SAIL</th>
<th>TSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
<td>%of Receivable</td>
</tr>
<tr>
<td>1999-2000</td>
<td>50.76</td>
<td>100.00</td>
<td>65.88</td>
<td>100.00</td>
<td>17.74</td>
<td>100.00</td>
<td>22.08</td>
<td>100.00</td>
</tr>
<tr>
<td>2000-01</td>
<td>32.74</td>
<td>64.49</td>
<td>15.36</td>
<td>23.32</td>
<td>17.81</td>
<td>100.40</td>
<td>20.23</td>
<td>91.63</td>
</tr>
<tr>
<td>2001-02</td>
<td>19.34</td>
<td>38.10</td>
<td>15.88</td>
<td>24.11</td>
<td>14.97</td>
<td>84.37</td>
<td>15.38</td>
<td>69.67</td>
</tr>
<tr>
<td>2002-03</td>
<td>15.07</td>
<td>29.69</td>
<td>5.89</td>
<td>8.94</td>
<td>14.78</td>
<td>83.34</td>
<td>11.50</td>
<td>52.09</td>
</tr>
<tr>
<td>2003-04</td>
<td>17.46</td>
<td>34.40</td>
<td>4.16</td>
<td>6.31</td>
<td>11.34</td>
<td>63.93</td>
<td>7.04</td>
<td>31.88</td>
</tr>
<tr>
<td>2004-05</td>
<td>12.96</td>
<td>25.53</td>
<td>5.74</td>
<td>8.71</td>
<td>9.71</td>
<td>54.72</td>
<td>5.56</td>
<td>25.16</td>
</tr>
<tr>
<td>2005-06</td>
<td>22.00</td>
<td>43.35</td>
<td>102.33</td>
<td>155.33</td>
<td>9.68</td>
<td>54.54</td>
<td>5.12</td>
<td>23.19</td>
</tr>
<tr>
<td>2006-07</td>
<td>11.02</td>
<td>21.71</td>
<td>105.75</td>
<td>160.52</td>
<td>10.02</td>
<td>56.50</td>
<td>4.76</td>
<td>21.54</td>
</tr>
<tr>
<td>2007-08</td>
<td>7.08</td>
<td>13.94</td>
<td>N.A</td>
<td>N.A</td>
<td>11.87</td>
<td>66.89</td>
<td>4.12</td>
<td>18.65</td>
</tr>
<tr>
<td>2008-09</td>
<td>6.79</td>
<td>13.38</td>
<td>N.A</td>
<td>N.A</td>
<td>11.79</td>
<td>66.48</td>
<td>5.54</td>
<td>25.09</td>
</tr>
<tr>
<td>AVG.</td>
<td>19.52</td>
<td>38.46</td>
<td>40.13</td>
<td>60.90</td>
<td>12.97</td>
<td>73.12</td>
<td>10.13</td>
<td>45.89</td>
</tr>
<tr>
<td>S.D</td>
<td>13.39</td>
<td>26.37</td>
<td>42.51</td>
<td>64.53</td>
<td>3.14</td>
<td>17.72</td>
<td>6.80</td>
<td>30.79</td>
</tr>
<tr>
<td>max</td>
<td>50.76</td>
<td>100.00</td>
<td>105.75</td>
<td>160.52</td>
<td>17.81</td>
<td>100.40</td>
<td>22.08</td>
<td>100.00</td>
</tr>
<tr>
<td>min</td>
<td>6.79</td>
<td>13.38</td>
<td>4.16</td>
<td>6.31</td>
<td>9.68</td>
<td>54.54</td>
<td>4.12</td>
<td>18.65</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009

It may be observed from the table that the accounts receivables turnover ratio of JSWSL had fluctuated throughout the period of study from 1999-2000 to 2008-09. The ratio was 50.76 percent in 1999-2000 which decreased to 17.46 percent in 2003-04. In 2005-06 the ratio increased to 22.00 percent but thereafter it shows decreasing trend and reached to 6.79
percent in 2008-09 with an average of 19.52 percent. The average of accounts receivable turnover ratio of JS&AL was 40.13 percent. JS&AL had produced good turnover among the selected steel companies. It ranged between 105.75 percent in 2006-07 and 4.16 times in 2003-04. The receivable turnover ratio of SAIL 17.74 percent in 1999-2000 and decreased to 11.34 percent 2003-04 and then it went down to 9.68 percent in 2005-06. In SAIL there was a fluctuated trend in accounts receivables turnover ratio during the study period. The average of 10.13 percent too discloses a very slow speed with which the company's receivables get converted in cash. The average of indices of accounts receivable turnover ratio worked out at 45.89 showing poor performance during study period. The average ratio was 10.13 percent which showed downward trend during the study period. The ratio was the highest of 22.08 percent and lowest of 4.12 percent. The receivable turnover ratio was 22.08 percent in 1999-2000 and then it went high to 5.56 percent in 2003-04 and then after it has again gone up to 5.54 percent in 2007-08 with standard deviation of 6.80 percent.

In nut shell, the accounts receivables to sales ratio during the study period were the highest for Jindal Steel & Alloys Ltd followed by Tata Steel Ltd., J S W Steel Ltd. and Steel Authority Of India Ltd. The TSL displayed very good ratio while the JSWSL recorded proportionately very low turnover ratio.

6. Average Collection Period

The average collection period refers to the average time lag between sales and collection measurable in terms of number of days. In other words, it may be regarded as rough estimate of number of a debtor. Hence, it is a significant measure of the collection activity and quality of. Collection of book debts is the concluding stage in the function of sales transaction. It is given as:

\[
\text{Average Collection Period} = \frac{365}{\text{Turnover of Receivables.}}
\]

Prolonged collection period owing to delays and other reasons creates hazards in the way of sustaining business operations because of financial scarcity. Thus, slow paying customers have to be handled. As an old account causes heavy collection expenses and increase the profitability of bad debt losses. Shorter average collection periods signify better credit management and liquidity of accounts receivables. As shorter average collection period means lower of customer. Further, the sooner the firm receives the cash due on sales, the
sooner it can put the money to work for earning interest. That is the cost of a long collection period is a return (interest) lost on these funds. A rule of thumb is that the collection period should not exceed $\frac{1}{3}$ times the regular period; that is if the company's typical terms call for payment in net 30 days, it is said that average collection period should not exceed 40 days i.e. $[30 + (30 \times \frac{1}{3})]$ Table 6.8 presents the average collection period of selected steel companies during 1999-2000 to 2008-09.

**Table 6.8**

**Average Collection Period Of Steel Companies In India.**

*(From 1999-2000 To 2008-2009)*

(Period in Days)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JSWSL</td>
<td>185</td>
<td>119</td>
<td>71</td>
<td>55</td>
<td>64</td>
<td>47</td>
<td>80</td>
<td>40</td>
<td>26</td>
<td>25</td>
<td>71.26</td>
<td>48.87</td>
<td>185.29</td>
</tr>
<tr>
<td>JS&amp;A L</td>
<td>240</td>
<td>56</td>
<td>58</td>
<td>22</td>
<td>15</td>
<td>15</td>
<td>374</td>
<td>386</td>
<td>N.A</td>
<td>N.A.</td>
<td>145.74</td>
<td>155.58</td>
<td>386.00</td>
</tr>
<tr>
<td>SAIL</td>
<td>65</td>
<td>65</td>
<td>55</td>
<td>54</td>
<td>41</td>
<td>35</td>
<td>35</td>
<td>43</td>
<td>47</td>
<td>43</td>
<td>47.34</td>
<td>11.47</td>
<td>65.01</td>
</tr>
<tr>
<td>TSL</td>
<td>81</td>
<td>74</td>
<td>56</td>
<td>42</td>
<td>26</td>
<td>20</td>
<td>19</td>
<td>17</td>
<td>15</td>
<td>20</td>
<td>36.99</td>
<td>24.82</td>
<td>80.60</td>
</tr>
<tr>
<td><strong>avg.</strong></td>
<td>143</td>
<td>79</td>
<td>60</td>
<td>43</td>
<td>36</td>
<td>30</td>
<td>127</td>
<td>120</td>
<td>28</td>
<td>29</td>
<td>75.33</td>
<td>60.18</td>
<td>179.23</td>
</tr>
</tbody>
</table>

Sources: Annual Reports of steel Companies From 1999-2000 to 2008-2009
It can be observed from the table JSWSL had a long average collection period of 71.26 day on an average tends to increase the possibility of bad debts losses. A wide variation from 185.29 days to 24.80 days had been registered. JS&AL must be praised for having longest ten seven years’s average collection period of 145.74 days. Though during the first four study year this period the ratio had been more than the recorded ten year average. JS&AL had failed to prove the liquidity of accounts receivable. SAIL had a short average collection period of 47.34 days on average indicating towards the solvency of accounts receivables. , on the whole SAO may be regarded as having better credit management and liquidity of accounts receivables. The average collection period of TSL was 36.99 days with standard deviation of 24.8 percent. The ratio showed down ward trend. This indicates that the company may suffer from financial sacristry if prompt credit collection would not be made a practice.
REFERENCES: