UNIT IV

Subject name	Subject Code	Semester	Prepared By
Financial Management	18BBA31C	III	Dr.K.Karthikai, Assistant Professor in BBA

Meaning of working capital

Working capital is the amount of funds required for meeting day-to-day expenses of the business. The firm starts with cash. It buys raw materials, employs workers and spends on expenditures like advertising etc. Even then it may not receive cash immediately if sold on credit. The firm will have to use its own cash before it gets back sales revenue and then the cycle can go on. In simple words, working capital refers to that part of the firm's capital which is required for financing short term or current assets such as cash, marketable securities, debtors and inventories, Funds, thus, invested in current assets keep revolving fast and are being constantly converted into cash and this cash flows out again in exchange for other current assets. Hence, it is also known as revolving or circulating or short term capital.

CONCEPT OF WORKING CAPITAL

There are two concepts of Working Capital:

Gross Working Capital: It refers to the firm's investment in total current or circulating assets.

Net Working Capital: The term 'Net Working Capital' has been defined in two different ways: (i) It is the excess of current assets over current liabilities. It is defined as only the difference between current assets and current liabilities. The former seems to be a better definition as compared to the latter. (ii) It is that portion of a firm's current assets which is financed by long-term funds.

For example, a business requires investment in current assets such as cash, accounts receivable and short-term investments, etc., to the extent of Rs. 15,000. A part of this requirement can be financed by the firm by purchasing on credit or postponing certain payments or, in other words, by creation of current liabilities such as accounts payable, outstanding expenses, etc. Suppose the amount of current Liabilities comes to Rs. 10,000. This means the business still needs Rs. 5.000 for its working purposes. This amount will have

to be financed from long term sources of funds as indicated in the definition of Net Working Capital

NEED FOR WORKING CAPITAL

The basic objective of financial management is to maximise shareholders' wealth. This is possible only when the company earns sufficient profit. The amount of such profit largely depends upon the magnitude of sales. However sales do not convert into cash instantaneously. There is always a time gap between the sale of goods and receipt of cash. Working Capital is required for this period in order to sustain the sales activity. In case adequate working capital is not available for this period, the company will not be in a position to sustain the sales since it may not be in a position to purchase raw materials, pay wages and other expenses required for manufacturing the goods to be-sold. **Operating Cycle** The working capital is required because of the time gap between the sales and their actual realisation in cash. This time gap is technically termed as "operating cycle" of the business. In case of a manufacturing company, the operating cycle is the length of time necessary to complete the following cycle of events: (i) Conversion of cash into raw materials; (ii) Conversion of raw materials into work-in-process; (iii) Conversion of work-in-process into finished goods; (iv) Conversion of finished goods into accounts receivable; and (v) Conversion of accounts receivable into cash. This cycle will be repeated again and again. In the case of a "trading firm" the operating cycle will include the length of time taken for (i) conversion of cash into debtors, and (ii) conversion of debtors into cash.

TYPES OF WORKING CAPITAL

Working capital can be divided into two categories on the basis of time: 1. Permanent Working Capital, and 2. Temporary or Variable Working Capital. **Permanent Working Capital** This refers to that minimum amount of investment in all current assets which is required at all times to carry out minimum level of business activities. In other words, it represents the current assets required on a continuing basis over the entire year. This type of working capital is "core current assets".

The following are the characteristics of this type of working capital:
1. Amount of permanent working capital remains in the business in one form or another. This is particularly important from the point of view of financing. The suppliers of such working capital should not expect its return during the life-time of the firm.

2. It also grows with the size of the business. In other words, greater the size of the business, greater is the amount of such working capital and vice versa. Permanent working capital is permanently needed for the business and, therefore, it should be financed out of long-term funds.

Temporary Working Capital The amount of such working capital keeps on fluctuating from time to time on the basis of business activities. In other words, it represents additional current assets required at different times during the operating year. For example, extra inventory has to be maintained to support sales during peak sales period. Similarly, receivables also increase and must be financed during the period of high sales. On the other hand, investment in inventories, receivables, etc., will decrease in periods of depression. Suppliers of temporary working capital can expect its return during off season when it is not required by the firm. Hence, temporary working capital is generally financed from short-term sources of finance such as bank credit.

Significance of working capital Every business firm requires some amount of working capital. Even a fully equipped manufacturing firm is sure to collapse without (a) an adequate supply of raw materials to process; (b) Cash to meet the wage bill; (c) The capacity to wait for the market for its finished product and (d) the ability to grant credit to its customers. Similarly, a commercial enterprise is virtually good for nothing without merchandise to sell. Working capital, thus, is the backbone of a business. As a matter of fact, any organization, whether profit oriented or otherwise will not be able to carry on productive and distributive activities smoothly without adequate working capital.

Adequacy of working capital

Every firm is supposed to have adequate working capital i.e., as much as needed by the firm. It should neither be excessive nor inadequate. Both inadequate and redundant working capital situations are dangerous. Excess working capital means idle funds lying with the firm and not earning any profit for it. Whereas inadequate working capital means that the firm does not have sufficient funds for financing its daily business activities, which ultimately result in stoppage of production and reduced productivity. It is rightly said, Inadequate working capital is dangerous; whereas redundant working capital is a criminal waste.

Advantages of adequate working capital

(i) **Cash discount** : The business can avail the advantage of cash discount by paying cash for the purchase of raw materials and merchandise. If proper cash balance is maintained, this will reduce the cost of production.

(ii) **Sense of security and confidence** : Adequate working capital creates a sense of security and confidence not only among the business executives but also among the customers, creditors and business associates.

(iii) **Credit worthiness** : Prompt payment of dues results in establishing credit worthiness of the business. This facilitates commanding favourable terms for further borrowings.

(iv) **Continuous supply of raw materials** : A firm with adequate working capital is assured of regular supply of required raw materials on the basis of prompt payment.

(v**) Exploitation of good opportunities** : Good opportunities can be exploited in case of adequacy of capital in a concern. For example, a firm may make off-season purchases resulting in substantial savings or it can fetch big supply orders resulting in good profits.

(vi) **Increase in productivity** : Fixed assets of a firm cannot be put into proper use without adequate working capital. Proper management of current assets results in optimum utilisation of fixed assets as well and thereby increase overall productivity.

(vii) **Attractive dividend** : Adequate working capital enables a firm to declare and distribute attractive dividend to its shareholders. The distribution of good dividend also increases the market value of shares.

(vii) **Meeting unforeseen contingencies** : In case, a firm maintains adequate working capital, certain unforeseen contingencies such as financial crisis due to heavy losses, business oscillations etc., can easily be overcome.

Dangers of redundant or excessive working capital

(i)**Inefficient management**: Excessive working capital indicates inefficient management of the firm. It shows that the management is not interested in expanding the business, otherwise the excessive working capital might have been utilised for this purpose.

(ii)**Increased capital expenditure** : As enough fund is available, there may be boost up in acquiring plant and machinery to enhance production. In case there is not enough sales potentiality with adequate margin of profit, such fixed investment may not be worthwhile for fund employment.

(iii)**Over capitalization** : Excessive working capital gives birth to over capitalization with all its evils. Over capitalization is not only disastrous to the smooth survival of the firm but also affects the interests of those associated with the firm.

(iv) **Lower return on capital employed** : A firm with excessive working capital cannot earn a proper rate of return on its total investments, as profits are distributed on the whole of its capital. This brings down the rate of return to the shareholders. In turn, lower dividend reduces the market value of shares and causes capital loss to the shareholders.

(v**) Misapplication of funds** : Firms having excessive working capital cannot make use of funds wisely. Due to excessive working capital, it is difficult to control the purchase of many things, which are not required in the business. Excessive inventories and fixed assets purchased by the firm do not add to its profitability and increase its maintenance costs and losses due to theft, waste and mishandling.

(vi) **Destruction of turnover ratios** : Redundant working capital destroys the control of turnover ratios which are commonly used in the conduct of an efficient business. It eradicates all other guides and sign post, commonly employed in conducting and operating a business.

(vii) **Liquidity Vs profitability** : The situation of liquidity and profitability may be unbalanced.

DETERMINANTS OF WORKING CAPITAL REQUIREMENTS

The following factors are considered for a proper assessment of the quantum Working capital requirements:

a)**Nature of business** : The requirement of working capital is very limited in public sector undertakings such as electricity, water supply and railways because they offer cash sales only and supply services, not products and no funds are tied up in inventories and receivables. On the other hand, the trading and financial firms require less investment in fixed assets but have to invest large amount of working capital along with fixed investments.

b)**Length of production cycle** : The longer the manufacturing time, the raw materials and other supplies have to be carried for a longer time in the process with progressive increment of labour and service costs before the final product is obtained. So working capital is directly proportional to the length of the manufacturing process.

c)**Rate of stock turnover** : There is an inverse co-relationship between working capital and the velocity or speed with which the sales are effected. A firm having a high rate of stock turnover will need lower amount of working capital as compared to a firm having a low rate of turnover.

d)**Business cycle** : In period of boom, when the business is prosperous, there is need for larger amount of working capital due to rise in sales, rise in prices, optimistic expansion of business etc. On the contrary, in times of depression, the business contracts, sales decline, difficulties are faced in collection from debtors and the firm may have a large amount of working capital.

e) **Earning capacity and dividend policy** : Some firms have more earning capacity than others due to quality of their products, monopoly conditions, etc. Such firms may generate cash profits from operations and contribute to their working capital. The dividend policy also affects the requirement of working capital. A firm maintaining a steady high rate of cash dividend irrespective of its profits, needs working capital than the firm that retains larger part of its profits and does not pay so high sate of cash dividend.

f)**Operating cycle** : The speed with which the operating cycle completes jts round (i.e., cash -- raw materials - finished product - accounts receivables - cash) plays a decisive role in influencing the working capital needs.

g)**Operating efficiency** : Operating efficiency means optimum utilisation of resources. The firm can minimise its need for working capital by efficiently controlling its operating costs. With increased operating efficiency, the use of working capital is improved and pace of cash cycle is accelerated. Better utilisation of resources improves profitability and helps in relieving the pressure on working capital.

h) **Price level changes** : Generally, rising price level requires a higher investment in working capital. With increasing prices, the same levels of current assets need enhanced investment. However, firms which can immediately revise prices of their products upwards may not face a severe working capital problem in periods of rising levels. The effects of increasing price

level may, however, be felt differently by different firms due to variations in individual prices. It is possible that some companies may not be affected by rising prices, whereas others may be badly hit by it.

i)**Degree of mechanisation** : In a highly mechanised concern having a low degree of dependence on labour, working capital requirement gets reduced. Conversely, in labour intensive industries, greater sums shall be required to pay for wages and related facilities.

j) **Growth and expansion of business** : In the beginning, the working capital requirements of a firm are low. However, with the gradual growth and expansion, its working capital needs also increase. Larger amount of working capital in a growing concern is required for its expansion programmes.

(k) **Seasonal variations** : Some industries manufacture and sell goods only during certain seasons. For example, sugar, oil, timber, and textile industries have either seasonal supplies of raw materials or make their sales in a particular season. Hence, the working capital requirements of such industries will be higher during a certain season as compared to any other period.

l) **Capital structure of the firm** : If shareholders have provided some funds towards the working capital needs (atleast to satisty the permanent working capital needs), the management will find it relatively easy to manage working capital. If the firm has to depend entirely upon outside sources for both permanent and temporary working capital needs, it faces an uphill task under dear money conditions.

m) **Credit policy**: A firm making purchases on credit and sales on cash will always require lower amount of working capital. On the contrary, a firm which is compelled to sell on credit and at the same time having no credit facilities may find itself in a tight corner. Prevailing trade Practices and changing economic conditions do generally exert greater influence on the credit policy of the concern.

n)**Size of the business** : The size of business has also an important impact, on its working capital needs. Size may be measured in terms of scale of operation. A firm with larger scale of operation will need more working capital than a small firm.

o) **Production policy**: The production policies pursued by the management have a significant effect on the requirements of working capital of the business. The production schedule has a

great influence on the level of inventories. The decisions of the management regarding automation, etc. will also have effect on working capital requirements. In case of labour intensive industries, the working capital requirements will be more. While in case of a highly automatic plant, the requirement of long term funds will be more.

p) **Profit margin** : Firms differ in their capacity to generate profit from business operations. Some firms enjoy a dominant position, due to quality product or good marketing management or monopoly power in the market and earn a high profit margin. Some other firms may have to operate in an environment of intense competition and may earn a low margin of profit. A high net profit margin contributes towards the working capital pool. In fact, the net profit is a source of working capital to the extent it has been earned in cash.

q) **Liquidity and profitability**: In case, a firm desires to take a greater risk for bigger gains, it reduces the sjze of its working capital in relation to its sales. If it is interested in improving its liquidity, it increases the level of its working capital. However, this policy is likely to result in a reduction of the sales volume, and therefore, of profitability. A firm, therefor, should choose between liquidity and profitability and decide about its working capital requirements accordingly.

r) **Capacity to repay** : A firm's ability to repay determines level of it working capital. The usual practice of a firm is to prepare cash flow projections according to its plans of repayment and to fix the working capital levels accordingly.

s) **Value of current assets** : A decrease in the real value of current ass as compared to their book value reduces the size of the working capital if the real value of current assets increases, there is an increase working capital.

t)**Means of transport and communication** : Working capital needs also depend upon the means of transport and communication. If they are not well developed, the industries will have to keep huge stocks of raw materials, spares, finished goods, etc., at places of production as well as distribution outlets.

MEANING OF CASH

The term "cash" with reference to cash management is used in two senses. In a narrower sense it includes coins, currency notes, cheques, bank drafts held by a firm with it and the demand deposits held by it in banks. In a broader sense it also includes "near-cash assets"

such as marketable securities and time deposits with banks. Such securities or deposits can immediately be sold or converted into cash if the circumstances require. The term cash management is generally used for management of both cash and near-cash assets.

MOTIVES FOR HOLDING CASH

A distinguishing feature of cash as an asset, irrespective of the firm in which it is held, is that it does not earn any substantial return for the business. In spite of this fact cash is held by the firm with the following motives:

Transaction Motive - A firm enters into a variety of business transactions resulting in both inflows and outflows of cash. At times the cash outflows may exceed the cash inflows. In order to meet the business obligations in such situations, it is necessary to maintain adequate cash balance. Thus, cash balance is kept by the firms with the motive of meeting routine business payments.

Precautionary Motive - A firm keeps cash balance to meet unexpected cash needs arising out of unexpected contingencies such as floods, strikes, presentment of bills for payment earlier than the expected date, unexpected slowing down of collection of accounts receivable, sharp increase in prices of raw materials. etc. The more is the possibility of such contingencies, the more is the amount of cash kept by the firm for meeting them.

Speculative Motive - A firm also keeps cash balance to take advantage of unexpected opportunities, typically outside the normal course of the business. Such motive is, thereforé, of purely a speculative nature. For example, a firm may like to take advantage of an opportunity to purchase raw materials at the reduced price on payment of immediate cash or delay purchase of materials in anticipation of declining prices. Similarly, it may like to keep some cash balance to make profit by buying securities in times when their prices fall on account of tight money conditions, etc.

Compensation Motive - Banks provide certain services to their clients free of charge. They, therefore, usually require clients to keep a minimum cash balance with them which helps them to earn interest and thus compensate them for the free services so provided. Business firms normally do not enter into speculative activities and, therefore, out of the four motives of holding cash balances, the two most important motives are the transactions motive and the compensation motive.

OBJECTIVES OF CASH MANAGEMENT

There are two basic objectives of cash management:

1. To meet the cash disbursement need as per the payment schedule.

2. To minimise the amount locked up as cash balances. As a matter of fact both the objectives are mutually contradictory and, therefore, it is a challenging task for the finance manager to reconcile them. And to have the best in this process.

Meeting Cash Disbursement

The first basic objective of cash management is to meet the payment schedule. In other words, the firm should have sufficient cash to meet the various requirements of the firm at different periods or times. The business has to make payment for purchase of raw material , purchase of plant, etc. The business activity may come to a grinding halt if the payment schedule is not maintained. Cash has, therefore, been aptly described as the "oil to lubricate the ever-turning wheels of the business, without it the process grinds to a stop."

Minimising Funds Locked up as Cash Balances

The second basic objective of cash management is to minimise the amount locked up as cash balances. In the process of minimising the cash balances, the Finance Manager is confronted with two conflicting aspects. A higher cash balance ensures proper payment with all its advantages. But this will result in a large balance of cash remaining idle. A low level of cash balance may result in failure of the firm to meet the payment schedule. The finance manager should, therefore, try to have an optimum amount of cash balance keeping the above facts in view.

CASH MANAGEMENT: BASIC PROBLEMS

Cash management involves the following four basic problems: 1. Controlling levels of cash, 2. Controlling inflows of cash. 3. Controlling outflows of cash, and 4. Optimum investment of surplus cash.

1. Controlling Level of Cash One of the basic objectives of cash management is to minimise the level of cash balance with the firm. This objective is sought to be achieved by means of the following:

Preparing Cash Budget

Cash budget or cash forecast is the most significant device for planning and controlling the use of cash. It involves a projection of future cash receipts and cash disbursements of the firm over various intervals of time. It reveals to the financial manager the timings and amount of expected cash inflows and outflows over a period studied. With this information, he is better able to determine the future cash needs of the firm, plan for the financing of these needs and exercise control over the cash and liquidity of the firm.
A cash budget is usually prepared by estimating the cash receipts from various sources and cash payments to different agencies. The receipts and payments may be divided into two specific categories as given below:

1. Receipts: (a) Capital, and (b) Revenue.

2. Payments: (a) Capital, and (b) Revenue.

The **Capital Receipts** would be: (i) the proceeds of issue of shares or debentures or loans to be raised, and (ii) Sale proceeds of long-term investments or fixed assets. The **Revenue Receipts** would be: (i) Amount receivable on cash sale of goods or services, (ii) Amount receivable from customers or clients, and (iii) Other business receipts like commission, income from investments, etc.

The **Capital payments** would include: (it) Redemption of Redeemable Preference Shares, (ii) Payment of long term loans, and (iii) Purchase of fixed assets, etc. The **Revenue payments** may be of the following types: (i) Payments for materials supplied, (ii) Payment of wages, (iii) Payment of overheads, (iv) Other payments like interest on loans and income tax, etc. and (v) Payment of dividends.

In the opening balance of cash of a period, the estimated cash receipts are added and the estimated cash payments are deducted to find out the closing balance. This will become the opening balance of cash for the next period.

Providing for Unpredictable Discrepancies Cash budget predicts discrepancics between cash inflows and outflows on the basis of normal business activities. It does not take into account discrepancies between cash inflows and outflows on account of unforeseen circumstances such as strikes, short-term recession, floods, etc. A certain minimum amount of cash balance has, therefore, to be kept for meeting such unforeseen contingencies. Such

amount is fixed on the basis of past experience and some intuition regarding the future. **Consideration of Short Costs** The term short costs refers to the costs incurred as a result of shortage of cash. Such costs may take any of the following forms.
(a) The failure of the firm to meet its obligations in time may result in legal action by the firm's creditors against the firm. This costs in terms of fall in the firm's reputation besides financial costs incurred in defending the suit.

(b) Borrowing may have to be resorted to at high rates of interest. The firm may also be required to pay penalties, etc., to banks for not meeting the obligation on time.
(c) There may be loss on account of losing of cash discount besides losing opportunity to make purchases at lower prices.

Availability of Other Sources of Funds

A firm can avoid holding unnecessary large balance of cash for contingencies in case it has adequate arrangements with its bankers for borrowing money in times of emergencies. Of course, for such arrangements, the firm has to pay a slightly higher rate of interest than that on a long-term debt. But considerable saving in interest costs will be effected because such interests will have to be paid only for shorter period.

2. Controlling Inflows of Cash Having prepared the cash budget, the financial manager should also ensure that there is no significant deviation between the projected cash inflows and the projected cash outflows. This requires controlling of both inflows as well as outflows of cash. The financial manager has to devise appropriate techniques which help not only in prevention of fraudulent diversion of cash receipts but also in speeding up collection of cash. Speedier collection of cash can be made possible by adoption of the following techniques; **Concentration Banking** Concentration banking is a system of decentralising collections of accounts receivable in case of large firms having their business spread over large areas. According to this system, a large number of collection centres are established by the firm in different areas selected on geographical basis. The firm opens its bank accounts in local banks of different areas where it has its collection centres. The collection centres are required to collect cheques from their customers and deposit them in the local bank accounts. Instructions are given to the local collection centres to transfer funds over a certain limit daily telegraphically to the bank at the Head Office. This facilitates fast movement of funds. The company's treasurer on the basis of the daily report received from the Head Office bank about the collected funds can use them for disbursement according to need.

This system of Concentration Banking results in the following **advantages**: (a) The mailing time is reduced since the collection centres themselves collect cheques from the customers and immediately deposit them in local bank accounts. Moreover, when the local collection centres are also used to prepare and send bills to the customers in their areas, the mailing time in sending bills to the customers is also reduced. (b) The time required to collect cheques is also reduced since the cheques deposited in the local bank accounts are usually drawn on banks in that area. This all helps in quicker collection of cash.

Lock-Box System Lock-Box System is a further step in speeding up collection of cash. In case of concentration banking cheques are received by collection centres who, after processing, deposit them in the local bank accounts. Thus, there is a time gap between actual receipt of cheques by a collection centre and its actual depositing in the local bank account. Lock-box system has been devised to eliminate delay on account of this time gap. According to this system, the firm hires a post-office box and instructs its customers to mail their remittances to the box. The firm's local bank is given the authority to pick the remittances directly from the local box. The bank picks up the mail several times a day and deposits the cheques in the firm's account. Standing instructions are given to the local banks to transfer funds to the Head Office Bank when they exceed a particular limit.

The Lock-Box System offers the following **advantages**: (a) All remittances are handled by the bankers even prior to their deposit with them at a very low cost. (b) The cheques are deposited immediately upon receipt of remittances and the collecting process starts much earlier than under the system of concentration banking.

Besides the above methods, the firms use other methods also for prompt collection. For example, in case of large funds involved, the firms arrange for personal 'pick up' of the cheques from customers. They may also request their collecting bankers to present them before the drawee banks via air mail or through special messenger. In order to avoid unnecessary pockets of idle funds, the firms should maintain minimum number of bank accounts. Of course, small accounts with a number of banks may create some goodwill with bankers but it helps little in efficient management of cash. The firm, by closing these unnecessary accounts, can release funds which it can put to profitable use.

3. Control over Cash Outflows An effective control over cash outflows or disbursements

also helps a firm in conserving cash and reducing financial requirements. However, there is a basic difference between the underlying objective of exercising control over cash inflows and cash outflows. In case of the former, the objective is the maximum acceleration of collections while in the case of later, it is to slow down the disbursements as much as possible. The combination of fast collections and slow disbursements will result in maximum availability of funds. A firm can **advantage**ously control outflows of cash if the following considerations are kept in view: (i) Centralised system for disbursements should be followed as compared to decentralised system in case of collections. All payments should be made from a single control account. This will result in delay in presentment of cheques for payment by parties who are away from the place of control account.

(ii) Payments should be made on the due dates, neither before nor after. The firm should neither lose cash discount nor its prestige on account of delay in payments. In other words, the firm should pay within the terms offered by the suppliers.

(iii) The firm may use the technique of “playing float” for maximising the availability of funds. The term “float” means the amount tied up in cheques that have been drawn but have not yet been presented for payment. There is always a time lag between issue of a cheque by the firm and its actual presentment for payment. As a result of this a firm’s actual balance at bank may be more than the balance as shown by its books. This difference is called “payment in float”. The longer the “float period”, greater is the benefit to the firm. A firm can expand the opportunities for playing the float by having many bank accounts at different places. However, ‘playing float’ is a risky game and should be played very cautiously. The finance manager has to remain in constant touch with the bank to ensure that no cheque issued by the firm is dishonoured for want of funds since it may have very adverse consequences for the firm.

4. **Investing Surplus Cash** Following are the two basic problems regarding the investment of surplus cash: (i) Determination of the amount of surplus cash, and (ii) Determination of channels of investment.

Determination of Surplus Cash

Surplus cash is the cash in excess of the firm’s normal cash requirements. While determining the amount of surplus cash, the finance manager has to take into account the minimum cash

balance that the firm must keep to avoid risk or cost of running out of funds. Such minimum level may be termed as ‘safety level for cash’.

Determining Safety Level for Cash The financial manager determines the safety level of cash separately both for normal periods and peak periods. In both the cases, he has to decide about the following two basic factors: (i) Desired days of cash. It means the number of days for which cash balance should be sufficient to cover payments. (ii) Average daily cash outflows. This means the average amount of disbursements which will have to be made daily. The “desired days of cash” and “average daily cash outflows” are separately determined for normal and peak periods. Having determined them, safety level of cash can be calculated as follows:

During Normal Periods

Safety level of cash = Desired days of cash x Average daily cash outflows For example, if the finance manager feels that a safety level should provide sufficient cash to cover cash payments for seven days and the firm's average daily cash outflows are Rs. 6,000, the safety level of cash will be Rs. 42,000 (i.e., 7 x 6,000).

During Peak Periods

Safety level of cash = Desired days of cash at the busiest period « Average of highest daily cash outflows.

For example, during the three busiest days in the month of December, the firm’s cash outflows were Rs. 7,000, Rs. 8,000 and Rs. 9,000. The average cash outflows comes to Rs. 8,000. If the Finance Manager desires sufficient cash to cover cash payments for 5 days during the peak periods, the safety level would be Rs. 40,000 (i.e., Rs. 8,000 x 5). The above ratios are helpful in monitoring level of cash balances. The actual cash balance is compared with the daily cash outflows to determine the number of days for which cash is available. Such number of days is then compared with the desired days of cash to ascertain whether the firm is below or above the safety level.

Determination of Channels of Investment

The finance manager can determine the amount of surplus cash, by comparing the actual amount of cash available with the safety or minimum level of cash, as explained in the preceding pages. Such surplus cash may be either of a temporary or a permanent nature.

Temporary cash surplus consists of funds which are available for investment on a short-term basis (maximum 6 months), since they are required to meet regular obligation such as those of taxes, dividends, etc. Permanent cash surplus consists of funds which are kept by the firm to avail of some unforeseen profitable opportunity of expansion or acquisition of some asset. Such funds are, therefore, available for investment for a period ranging from six months to a year.

Criteria for investment. The finance manager while exercising such discretion or judgement, he usually takes into consideration the following factors:

(i) **Security.** This can be ensured by investing money in securities whose prices remain more or less stable.

(ii) **Liquidity.** This can be ensured by investing money in shortterm securities including short-term fixed deposits with banks

(iii) **Yield**. Of course most corporate managers give less emphasis to yield as compared to security and liquidity of investment. They, therefore, prefer short-term government securities for investing surplus cash. However, some corporate managers follow aggressive investment policies which maximise the yield on their investments.

(iv) **Maturity.** Surplus cash is available not for an indefinite period. Hence, it will be advisable to select securities according to their maturities keeping in view the period for which surplus cash is available. If such selecting is done carefully, the finance manager can maximise the yield as well as maintain the liquidity of investments.

For example, a firm can divide the surplus cash available with it in three categories:

(i) **Surplus cash, which is to be made available for meeting unforeseen disbursements**. Such cash should, therefore, be invested in securities which can be immediately sold without much loss. In case of such cash, liquidity is more important than yield.

(ii) **Surplus cash, which is to be made available on certain definite dates for making specific payments** such as those on account of tax, dividends, capital expendithre, etc. Such cash should. therefore, be invested in securities whose maturities coincide with the dates of payments.

(iti) **Surplus cash, which is a sort of general reserve and not required to meet any specific payment.** Such cash can, therefore, be invested in securities with relatively longer maturities and more favourable yields.

RECEIVABLES MANAGEMENT

Accounts receivable (also popularly termed as receivables) constitute a significant portion of the total current assets of the business next after inventories. They are a direct consequence of 'trade credit' which has become an essential marketing tool in modern business. When a firm sells goods for cash, payments are received immediately and, therefore, no receivables are created. However, when a firm sells goods or services on credit, the payments are postponed to future dates and receivables are created. Usually, the credit sales are made on open account which means that no formal acknowledgements of debt obligations are taken from the buyers. The only documents evidencing the same are a purchase order, shipping invoice or even a billing statement. The policy of open account sales facilitates business transactions and reduces to a great extent the paper work required in connection with credit sales.

MEANING OF RECEIVABLES

Receivables are asset accounts representing amounts owed to the firm as a result of sale of goods/services in the ordinary course of business.

They, therefore, represent the claims of a firm against its customers and are carried to the asset side of a balance sheet under titles such as accounts receivable, trade receivables, customer receivables or book debts. They are, the result of extension of credit facilities to the customers. The objective of such facility is to allow the customers a reasonable period of time in which they can pay for the goods purchased by them.

MEANING OF RECEIVABLES MANAGEMENT

Receivables are a direct result of credit sales. Credit sale is resorted to by a firm to push up its sales which ultimately result in pushing up the profits earned by the firm. At the same time, selling goods on credit results in blocking of funds in accounts receivable. Additional funds are, therefore, required for the operating needs of the business which involve extra costs in terms of interest. Moreover, increase in receivables also increases chances of bad debts. Thus, creation of accounts receivable is beneficial as well as dangerous. The financial manager has to follow a policy which uses cash funds as economically as possible in extending receivables without adversely affecting the chances of increasing sales and making more profits. Management of accounts receivable may, therefore, be defined as the process of making decisions relating to the investment of funds in the assets which will result in

maximising the overall return on the investment of the firm. Thus, "the objective of receivables management is to promote sales and profits until that point is reached where the return on investment in further funding of receivables is less than the cost of funds raised to finance that additional credit (i.e., cost of capital)."

PURPOSE OF RECEIVABLES Accounts receivable are created because of credit sales. Hence, the purpose of receivables is directly connected with the objectives of making credit sales.

The **objectives of 'credit sales** are as follows:

Achieving Growth in Sales If a firm sells goods on credit, it will generally be in a position to sell more goods than if it insisted on immediate cash payment. This is because many customers are either not prepared or not in position to pay cash when they purchase the goods. The firm can sell goods to such customers, in case it resorts to credit sales.

Increasing Profits Increase in sales results in higher profits for the firm not only because of increase in the volume of sales but also because of the firm charging a higher margin of profit on credit sales as compared to cash sales.

Meeting Competition A firm may have to resort to granting of credit facilities to its customers because of similar facilities being granted by the competing firms to avoid the loss of sales from customers who would buy elsewhere if they did not receive the expected credit. The overall objective of committing funds to accounts receivable is to generate a large flow of operating revenue and hence profit than what would be achieved in the absence of no such commitment.

COSTS OF MAINTAINING RECEIVABLES

The costs with respect to maintenance of receivables can be identified as follows:

Capital Costs Maintenance of accounts receivable results in blocking of the firm's financial resources in them. This is because there is a time lag between the sale of goods to customers and the payment by them. The firm has, therefore, to arrange for additional funds to meet its own obligations, such as payment to employees, suppliers of raw materials, etc. while waiting for payments from its customers. Additional funds may either be raised from outside or out of profits retained in the business. In both the cases, the firm incurs a cost. In the former case, the firm has to pay interest to the outsider while in the latter case, there is opportunity cost to the firm, ie., the

money which the firm could have earned otherwise by investing the funds elsewhere.

Administration Costs The firm has to incur additional administration costs for maintaining accounts receivable in the form of salaries to the staff kept for maintaining accounting records relating to customers, cost of conducting investigations regarding potential credit customers to determine their creditworthiness, etc.

Collection Costs The firm has to incur costs for collecting, the payments trom its credit customers. Sometimes, additional steps may have to be taken to recover money from defaulting customers.

Defaulting Costs Sometimes after making all serious efforts to collect money trom defaulting customers, the firm may not be able to recover the overdues because of the inability of the customers. Such debts are treated as bad debts and have to be written off since they cannot be realised.

FACTORS AFFECTING THE SIZE OF RECEIVABLES

The size of accounts receivable is determined by a number of factors, Some of the important factors are as follows:

Level of Sales This is the most important factor in determining the size of accounts receivable. Generally in the same industry, a firm having a large volume of sales will be having a larger level of receivables as compared to a firm with a small volume of sales. Sales level can also be used for forecasting change in accounts receivable.

Credit Policies The term credit policy refers to those decision variables that influence the amount of trade credit, ie., the investment in receivables. These variables include the quality of trade accounts to be accepted, the length of the credit period to be extended, the cash discount to be given and any special terms to be offered depending upon particular circumstances of the firm and the customer. A firm's credit policy, as a matter of fact, determines the amount of risk the firm is willing to undertake in its sales activities. If a firm has a lenient or relatively liberal credit policy, it will experience a higher level of receivables as compared to a firm with a more rigid or stringent credit policy. This is because of the two reasons: (i) A lenient credit policy encourages even the financially strong customers to make delays in payment resulting in increasing the size of the accounts receivable. (ii) Lenient credit policy will result in greater defaults in payments by financially weak customers thus resulting in increasing the size of receivables.

Terms of Trade The size of the receivables is also affected by terms of trade (or credit terms) offered by the firm. The two important components of the credit terms are (i) Credit period, and (ii) Cash discount.

Credit Period The term credit period refers to the time duration for which credit is extended to the customers. It is generally expressed in terms of "net days". For example, if a firm's credit terms are "net 15" it means the customers are expected to pay within 15 days trom the date of credit sale.

Credit period is generally governed by the norms prevailing in the industry. However, a firm may extend credit period to a longer duration for pushing up its sales.

Cash Discount Most firms offer cash discount to their customers for encouraging them to pay their dues before the expiry of the credit period. The terms of cash discount indicate the rate of discount as well as the period for which the discount has been offered. Of course, allowing cash discount results in a loss to the firm because of recovery of less amount than what is due from the customer but it reduces the volume of receivables and puts extra funds at the disposal of the firm for alternative profitable investment. The amount of loss thus suffered is, therefore, compensated by the income otherwise earned by the firm.

Optimum Size of Receivables

The optimum investment in receivables will be at a level where there is a trade-off between costs and profitability. When the firm resorts to a liberal credit policy, the profitability of the firm increases on account of higher sales. However, such a policy results in increased investment in receivables, increased chances of bad debts and more collection costs. The total investment in receivables increases and thus the problem of liquidity is created. On the other hand, a stringent credit policy reduces the profitability but increases the liquidity of the firm. Credit policy, therefore, involves a trade-off between the profits on sales, that bring in receivables, on the one hand and the cost of carrying bills receivables plus bad debt losses on the other. Thus, optimum credit policy occurs at a point where there is "tradeoff' between liquidity and profitability .

There are basically three aspects of management of receivables:

1. Credit policy
2. Credit Analysis
3. Control of Receivables.

1. Credit Policy The credit policy of a firm provides the framework to determine (a) whether or not to extend credit to a customer, (b) How much credit to extend and on which terms. The credit policy decision of firm has two broad dimensions i.e. (I) Credit standards and (ii) Credit terms.

(i) **Credit Standards :** The term "credit standards" represents the basic Criteria for the extension of credit to customers. The quantitative basis of establishing credit standards is factors such as credit ratings, credit references, average payment period and certain financial ratios. The overall standards cay be divided into two categories: (a) tight or restrictive or (b) Liberal or non- restrictive.. The trade off with reference to credit standards covers (a) the collection cost, (b) the average collection period, (c) level of bad debt losses and (d) level of sales. These facts should be considered while deciding whether to relax credit standards or not standards are relaxed, it means more credit will be extended, while if standards are tightened , less credit will be extended. The implications of the four factors are elaborated below:

(a) **Collection Cost:** The implications of relaxed credit standards are (a) credit, (b) a large credit department to service accounts receivable and related matters, (c) increase in collection cost. The effect of tightening of credit standards will be exactly the opposite. This cost is likely to be semi-variable because upto a certain point.

(b) **Investment in Receivables or the Average collection period**: The investment in receivables involves a capital cost, as funds have to be arranged by the firm to finance them till customers make payments. Moreover, the higher the average accounts receivables, the higher is the capital or carrying cost. A change in the credit standards relaxation or tightening leads to a change in the level of accounts receivables either (a) through a change in sales of (b) through a change in collections. A relaxation in credit standards implies an increase in sales which in turn, would lead to higher average accounts receivables. Further, relaxed standards would mean that credit is extended liberally so that it is available to even less credit worthy customers who will take a longer periods to pay overdues. The extension of trade credit to low-paying customers would result in a higher level of accounts receivables. In contrast, a tightening of credit standards would signify (a) a decrease in sales and lower average accounts receivables, and (b) an extension of credit limited to more credit worthy customers who can promptly pay their bills and thus, a lower average level of accounts receivables.

Thus, a change in sales and change in collection period together with a relaxation in standards would produce higher carrying cost, while changes in sales and collection period results in lower cost when credit standards are tightened. These basic reactions also occur when changes in credit terms or collection procedures are made.
(c) **Bad debts:** Another factor, which is expected to be affected by changes in the credit standards is bad debt losses. They can be expected to increase with rtelaxation in credit standards and decrease if credit standards become more restrictive.
(d) **Sales Volume**: Changing credit standards can also be expected to change the volume of sales. As standards are relaxed, sales are expected to increase. Conversely, a tightening is expected to cause a decline in sales.
(ii) **Credit Terms**: After the credit standards have been established, the management of the firm must determine the terms and conditions on which trade credit will be made available. The stipulations under which goods are sold 0n credit are referred to as credit terms. These relate to the repayment of the amount under the credit sales. Thus, credit terms specify the repayment terms of receivables, Credit terms have two components viz., (i) Credit period; and (ii) Cash discount.
(i) **Credit Period**: This is the duration of time for which trade credit is extended. The overdue amount must be paid by the customer during this period. It is generally stated in terms of a net date. If a firm’s credit terms are “net 30" ,it expects that payment will be made after 30 days from the date of credit sale. Following will be the expected effect of an increase in credit period: (a) Sales volume of the firm would increase. (b) Average collection period would increase.(c) Bad debt losses would increase. Thus the net effect of increase may be negative.
(ii) **Cash Discount**: Cash discount is offered to induce prompt payment. The percentage of discount and period during which it is available are reflecteg in the credit terms. For example, credit terms of “3/15 net 60” mean that discount of 3 percent is offered if the payment is made by the 15th day; otherwise the full payment is due by the 60th day. Liberalising the credit policy can result in the discount percentage being increased and/or the discount period being lengthened. Such an action tends to enhance sales (because the discount regarded as price reduction), reduce the average collection period (as customers pay promptly) and increase the cost of discount.
2. **Credit Analysis** After having determined the credit terms, the firm has to evaluate individual customers in respect of their credit worthiness and the possibility of bad

debts. For this purpose, the firm has to ascertain credit rating of prospective customers. The main task of finance manager is to rate the various customers who seek credit facility. It involves decisions regarding individual parties so as to ascertain how much credit can be extended and for how long. In foreign countries, specialised agencies are engaged in the task of providing rating information regarding individual parties. The finance manager has to analyse the credit worthiness of a party and sanction credit limit only after he is convinced that the party is sound. This would involve an analysis of the financial status of the party and his reputation in previous record of meeting commitments. The finance manager here has to employ a number of sources to collect credit information. The following are the important sources:

a) **Published Information**: The published financial statements of the customers for a few preceding years may be taken as a source of information as they contain a lot of details regarding the operations, Various ratios calculated on the basis of the financial statements may throw light on the profitability, liquidity and debt service capacity of a customer.

b) Bank Reference: The banker of the prospective client is another source of information about his financial condition. . This information can be obtained indirectly through the bank of the credit granting firm to ensure a higher degree of candidness.

(c) **Trade Reference**: The prospective customer may be asked to give two or three trade references. Thus the customer may give a list of personal acquaintances or some other existing credit worthy customers. The finance manager can send a short questionnaire, seeking relevant information, to the referees.

(4) **Salesman's interview and Report**: Credit worthiness can be evaluated by the reports provided by consulting salesmen or sales representatives,Such reports provide first-hand information to the firm for proper determination of the credit limit.

(e) **Credit Bureau Reports**: Associations for specific industries may maintain a credit bureau which provide useful and authentic credit information for their members.

(f) **Reports from other Agencies**: Non- banking financial companies (Leasing companies, etc.,) may maintain a list of defaulting customers/suit-filed cases. Sometimes this information may also be obtained by other firms on request basis.

(g) **Past Experience**: The past experience of dealings with an existing customer is a valuable source of essential data. The transactions should be carefully scrutinised and interpreted to find out the credit risk involved. Once the credit worthiness of a client is ascertained, the next question is to set a limit on the credit. In all such enquiries, the finance manager must be discreet and should always think of increasing sales.

Decision tree analysis of credit granting The decision whether to grant credit or not is a decision involving costs and benefits. When a customer pays, the seller makes profit but when he fails to pay, the amount of cost going into the product is also cost.

3. **Control of Receivables**

Another aspect of management of receivables is the control of receivables. Merely setting of standards and framing credit policy is not sufficient it is equal important to control receivables. In this reference, the efforts may be required in two directions i.e. collection policy and monitoring of receivables.

(i) **Collection policy**: Collection policy refers to the procedure followed collect accounts receivable, when, after the expiry of the credit period, to become due. This policy covers two aspects: (a) degree of effort to collect the overdues and (b) type of collection efforts.

(a) **Degree of collection efforts**: The collection policy of a firm may be tight or lenient. The collection policy would be tight if very rigorous procedures a followed. A tight collection policy has both types of implications benefits well as costs.The management has to consider the trade-off between them. Similarly if collection policy is further tightened, the bad debt losses would decline and average collection period would be reduced. Therefore, the profits would increase. But a very rigorous collection policy involves increasing collection cost. There may be decline in sales volume because some custom who may not like the pressure and intense efforts initiated by the firm may say to other firms. The effects of tightening the collection policy are ltem Direction of change (i) Bad debt- losses -Decrease Positive Effect on profits (i) Average collection period- Decrease- Positive Effect on profits (ii) Sales volume- Decrease -Negative Effect on profits (iv) Collection cost -Increase –Negative Effect on profits.A lenient collection policy also affects the cost benefit trade off. The effect of lenient policy will be just the opposite of the tight policy.

(b) **Type of collection efforts**: The second aspect of collection policy relates to the steps that should be taken to collect overdues from the customers. A well- established

collection policy should have clear-cut guidelines as to the sequence of collection efforts. After the credit period is over and payment remains due, the firm should initiate measures to collect them. The effort should be in the beginning, polite, but with the passage of time, it should gradually become strict. The steps usually taken are: (a) Letters, including reminders, to expedite payment; (b) Telephone calls for personal contact; (c) Personal visits; (d) Assistance of collection agencies and finally; (e) Legal action. The firm should take recourse to very stringent measures, like legal action, only after all the other avenues are exhausted. They not only involve a cost but also affect the relationship with the customers. The aim should be to collect as early as possible; genuine difficulties of the customers should be given due consideration.

(i) **Monitoring of Receivables** Receivables have to be monitored continuously to ensure the success of Collection efforts. Two methods are generally applied to monitor the receivables . (a) Average collection period and (b) Ageing schedule.

(a) **Average collection period**: It indicates the speed with which receivables / debtors are collected. It shows the number of days taken to collect money from debtors, It can be ascertained with the help of the following formula:

Average collection period = (Average Accounts Receivable/ Credit Sales) x No. of days in a year

Where, Accounts receivable = Debtors + Bills receivable.

Average Accounts Receivable = (Opening A /c Receivable + Closing A/c Receivable Accounts) /2

The average collection period is very helpful to the credit extending firms, explains to the firm whether its customers are paying money within a reasonable time, An increase in the period will result in greater blockage of funds receivables. The average collection period measures the quality of debtors and measures the rapidity or slowness with which money is collected from them, shorter collection period implies prompt payment by credit customers. It reduces the chances of bad debts. A longer collection period implies too liberal an, inefficient credit collection performance. However, it is difficult to provide, standard collection period for accounts receivables as it depends upon the nature of industry, seasonal character of the business and credit policies of the firm. In general the average collection period should not exceed 3 to 4 months.

(b) **Ageing schedule**: In this method, receivables are classified according to their age. This classification helps the firm in its collection efforts and enables the management to have a close control over the quality of individual accounts. The ageing schedule provides an effective method of comparing the liquidity of receivables with the liquidity of receivables in the past and also comparing current liquidity of receivables of one firm with that of other firms. This comparison can be made periodically. The preparation of ageing schedule requires going back to receivables ledger where the dates of each customer's purchases and payments are available. The ageing schedule, by indicating a tendency for old accounts to accumulate, provides a useful supplement to average collection period to receivables/ sales analysis. The analysis of receivables in terms of associated dates of sales enables the firm to recognise the recent increase and slumps in sales. To ascertain the condition of receivables for control purposes, it may be considered desirable to compare the current ageing schedule with an earlier schedule in the same firm and also to compare this information with the experience of other firms.