

CHAPTER - II

=====

WORKING CAPITAL MANAGEMENT

CHAPTER - II

=====

WORKING CAPITAL MANAGEMENT

-
1. Meaning and definition
 2. Concept of working capital management
 3. Composition of working capital
 4. Factors determining working capital
 management
 5. Financing of working capital
 6. Inventory management
 7. Management of debtors
 8. Cash management
 9. Measurement of optimum level of working
 capital
-
- =====

1. MEANING AND DEFINITION

The term 'working capital' has been commonly defined in two ways, keeping in view the purposes and scope of its use.¹

Working capital means the difference between current assets and current liabilities. At any time therefore, the working capital required may be estimated by -

- i) Totalling current assets that have to be maintained for efficient operations.
- ii) Adding to it the cash balance that has to be maintained to take advantage of any profitable opportunity that may arise as well as to see that there is no hindrance in day-to-day operations.
- iii) Deducting there from the amounts due to suppliers of goods and services.

In detailing the purposes for which working capital is usually required, one has to take into consideration a business enterprise under different sets of circumstances as a new concern, as a growing enterprise and under the varying conditions that surround and determine the fortunes of the business undertaking after it has attained maturity.

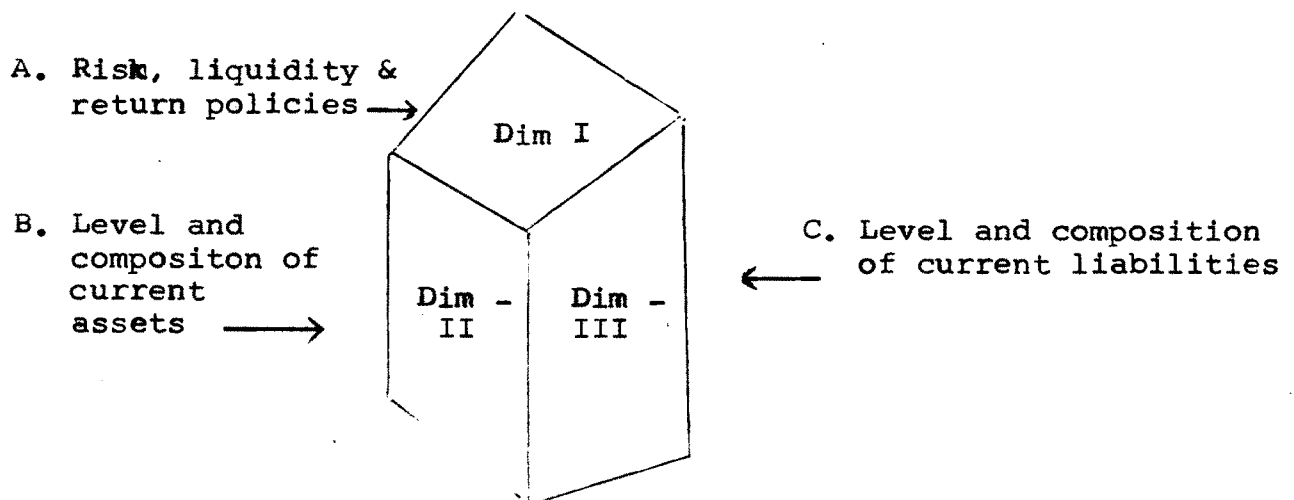
Every new business passes through an experimental period characterized by considerable tumblings and stumblings before it is firmly set on the right part. A part of the expenditures during such period should be categorised with fixed capital investments and a part constitutes the circulating, or working

capital, to get it going. The latter is considered as the primary necessity to start the enterprise and owing to the experimental stage of the business, a part of the original working capital is wasted. Its dissipation leaves a trail on the balance sheet in the shape of an account designated 'organization expenses account'.

Cyclical fluctuations in business volume cause wide variations in the demand for working capital and both extremes of the cycle are likely to create unusual demands. When businesses are prosperous, their optimistic managements do not hesitate to invest large amounts in inventories and receivables as that helps in pushing up sales.

Apart from investments in fixed assets, every enterprise has to arrange for adequate funds for meeting day-to-day expenses to keep it a going concern. So ordinarily speaking working capital refers to the low of ready funds necessary for working of the enterprise.

Working Capital Management is three dimensional :



Dimensions of working capital management.

- A. Dimension - I : is concerned with the formulation of policies with regard to risk, liquidity and return, keeping in view the goals and responsibilities of the business firm.
- B. Dimension - II : is concerned with the decision about the level and the composition of current assets.
- C. Dimension - III : is concerned with the decisions about the level and the composition of current liabilities.

The initial investment of cash as working capital for this specific purpose has to be continued till the moment arrives when sales-revenue commences flowing in substantially and in a regular way. From this stage the business is found to acquire a momentum of its own. The flow of revenue is expected to continue to replace the cash lost in its day-to-day out flow for the generation of the costs.

However, there is no agreement among the financial experts regarding the meaning of working capital. They define working capital in the following way -

(1) According to Bonneville :

"Any acquisition of funds which increases the current assets increases working capital also, for they are one and the same".

(2) According to Mead Baker Maloti :

"Working capital means current assets".

(3) According to Weston and Brigham :

"Working capital refers to a firm's investments in short term assets cash, short-term securities, accounts receivable and inventories.

(4) According to Hoagland :

"Working capital is descriptive of that capital which is not fixed. But the more common use of the working capital is to consider it as the difference between the book values of the current assets and current liabilities".

Working capital is sometimes, defined as 'the current assets of the firm notably cash and marketable securities accounts receivable and inventory'.² This is also known as Gross Working Capital. It refers to the funds invested in current assets. The concept of gross working capital is a going - concern concept. Use of this concept is helpful in providing for the correct amount of working capital at the right time so that the firm is able to realise the greatest return on its investment.³

Another term is Net Working Capital. This term refers to both : current assets and current liabilities. Current liabilities include accounts payable, short-term bank loans, and other payables and accruals becoming due within a year. Net working capital is defined as current assets minus current liabilities (current assets ⁴ current liability). This is a broader and perhaps more useful concept, because working capital management is concerned with the

problems that crop-up in managing the inter-relationship between CA & CL. This concept is helpful for those who are interested in determining the amount and nature of assets that may be used to pay current liabilities. The use of concept of net working capital is also useful for determining the ability to meet future operational needs, for management of investments and their financing.

2. CONCEPT OF WORKING CAPITAL MANAGEMENT

In every business working capital role is an important act. The explanation of the precise concept of working capital is essential for providing a proper framework of reference and focus of understanding for the entire exercise involved in working capital analysis. The term "Working Capital" has a variety of meanings. At one extreme, to many the word 'working capital' is synonymous with cash so that a working capital statement is nothing but an enumeration of the net effects of various kinds of business events on the cash. This explains the trend towards the preparation and presentation of 'cash flow statements' in published annual reports of accounts. Working capital is used as a synonymous for gross or total current assets.

A record of cash receipts and disbursements while valuable in its own way and undoubtedly a form of working capital statement is probably very narrow in its import and its analysis would fail to bring to light many important changes involving the disposition of resources. On the other extreme is the view that 'working

capital refer to economic values expressed in money measurements which are subject to industries jurisdiction - the reservoir of these values is described in the list of assets to which working capital stand committed and the source of these values is detailed in the list of liabilities from where the working capital are derived. This is known as 'all financial resources' concept of working capitals.

Where as both these concepts of 'working capital' constitute the extremes, the most acceptable view is the one relating to 'net working capital'. The term 'working capital' is particularly appropriate expression for denoting the welth of an enterprise which is continuously revolving through the stages most desired by the customers (inventories) and by the firm (cash). The intervening stage (receivables) identifies the current relationship between the firm and its customers. The magnitude of the investment in working capital is an important dimension of managerial strategy. The commitment of industries funds over and above those provided by short-term creditors is the net working capital. Thus, one of the prime uses of funds may be applied while, as they contract, funds may be provided for other purposes. The controllability of changes in the magnitude of working capital by managerial action makes this portion of wealth of an enterprise particularly sensitive indicator of financial condition.

The concept of 'funds' a 'working capital' has gained such wide acceptance as to make some people believe that the title,

'changes in working capital' is preferable to one which employs the term 'funds' such as 'sources and applications of funds'. It is of course, true, that during the cycle of business operations, the current assets are constantly circulating through the cash accounts but many transactions have a delayed effect upon cash. The purchase of merchandise shown as part of cost of goods sold may represent an increase in accounts payable rather than an immediate cash out lay. Similarly, expenses may be reflected in a current liability, such as accrued expenses, rather than immediately in cash.

However, increases in current debt have the same effect on net current assets or working capital as decreases in cash consequently, save for such exceptions as depreciation, the current income and expenses are best thought of as changing working capital rather than cash. This reasoning leads to visualising of balance sheet changes, including the net income as working capital changes rather than a movement of funds. From this point of view, 'statement of changes in working capital' supplemented by a schedule of individual changes in current assets and liabilities would certainly be most useful for the management and bank credit analyst.

Apart from the fact that the use of word 'working capital' helps in deciding the content of funds statement, it acts as the basis for determining the inclusion or exclusion of a financial event because any external transaction; which increases 'net working capital' is by definition, as 'source' of funds and any such transaction resulting in the decrease of 'net working capital' is

for the same reason, an 'application' of funds. To illustrate according to this definition of funds, a dividend paid through the issue of bonus shares would not find its place in the funds statement because it does not involve any net working capital account in either its debit or credit aspect while a dividend paid in cash is an application of funds as, payment being made in cash, it involves a reduction of 'net working capital' and therefore, a part of funds flow statement. Indirectly, this means that internal transactions - transfers and amortization between external and internal transactions is both proper and important to ensure the emergence of an internally consistent, logical and useful funds statement.

The concept of 'funds' as working capital is not free from criticism. Difficulty is encountered in accepting this connotation, when considering certain items, i.e. inventories and pre-payments. A stock of standard product ready for sale, may reasonably be treated as liquid source, but often a large part of the inventory represents work-in-progress throughout the various stages of production usually not covered by pending orders from customers. It is straining to refer to inventories or current pre-payments as 'funds'.

As indicated earlier both 'net' and 'gross' concepts of working capital have functional significance. Gross working capital deals with the problems of managing individual current assets in short-term. Net working capital deals with management

of net value of current assets in the long run. It is this concept which helps creditors and investors to judge the financial soundness of the enterprise from the view point of its capability to meet the contingencies.

Focus of 'Net' and 'Gross' concepts of working capitals :

	(
	(	- Relationship between CA & CL
	(
	(	- Perspective : Short-term & long-term
(- Net Concept —	(
(	(	- Evaluation by external parties
((
(	(	- Optimum balance among Risk, Return
((
(	(	and Liquidity
((
- Working Capital	(
((
(	(	- Individual current assets
((
(	(	- Perspective : Short-term
((
(	(	- Evaluation by the management
((
(- Gross Concept —	(	- Optimum investment in individual CA
	(
	(	- Financing of Current Assets
	(
	(	- Utilisation of short-term idle or
	(
	(	surplus funds
	(
	(

3. COMPOSITION OF WORKING CAPITAL

Net working capital consists of current assets minus current liabilities. Current assets are defined in two ways :-

- i) Assets which are used in the selling activities are current assets.
- ii) Assets which are expected to be converted into cash

within one accounting year, are current assets. For the purpose of working capital management, both the definitions are considered together.

Current assets components have one characteristic in common, i.e. each component is swiftly transformed into other asset forms. As for example cash is utilised to replenish inventories, inventories are diminished when sales are effected that augment either accounts receivable or cash collection of accounts receivable increases the cash balance and so on. Current assets are, therefore short lived. As stated earlier their life span close not normally exceed one year. But in practice some assets that violate this criterion may be still classified as current assets. For example, United States Government obligations that are anticipated to be held until a maturity date exceeding one year are often lumped together with cash and marketable securities.⁵

The major constituents of current assets are :

- (a) Inventories or stock : (Materials, commodities or goods to be used in the production process or to be sold in the normal day-to-day business operation and work-in-progress). Investments blocked in inventories of raw materials, work-in-progress and finished goods.
- (b) Debtors or accounts receivable : Amount blocked in accounts receivable.

- (c) Prepaid expenses : Expenses paid for goods and services the benefits of which have not yet received.
- (d) Short-term investments : It securities, shares, bonds purchased to invest short-term surplus funds.
- (e) Cash and bank balances : Realisation of accounts receivables, payments for trading and other operating expenses.

Current liabilities are obligations and debts due to outside parties in a short period usually within one year.

The major components of current liabilities are :-

(a) Accounts payable or trade creditors

Purchase of materials on credit from the sellers, the credit period being usually upto 30 or 45 days. Sometimes the credit period is extended to 60 days. Amount of accounts payable is governed mainly by the degree of competition and use of the trade.

(b) Bank overdrafts

Overdrafts are allowed by banks for short-term. The customers are allowed to withdraw in excess of credit balance standing in their current accounts. A fixed limit is granted to the borrower. The borrowers is allowed to overdraw within this limit. Overdrafts are repayable on demand. But generally overdrafts continue for long period by annual renewals of the overdrafts limits. There is no legal obligation on the part of banks to continue overdraft for long-term. Therefore bank

overdrafts are considered current liability.

(c) Bank loans

These are different from overdrafts as these are given by banks for fixed time period. In a loan account, the entire money is disbursed at one time either in cash or by transfer to the current account of the client. Loan accounts are not drawing accounts like overdraft or cash credit accounts.

(d) Cash credit

It is an arrangement under which a client is allowed an advance by bank upto a certain limit. A customer is not required to borrow the entire amount of advance @ one time. He draws to the extent of his requirements, and deposits his surplus funds in this account from time to time. Interest is not charged on the full amount of advance, but on the amount actually drawn by the client.

For fixing the credit limits and amounts of overdrafts banks consider several aspects of the working of Loanee organisation. These aspects are :-

- Production volume, value of production, trends in production, production mix;
- Sales volume, value of sales, trends in sales, sales mix. margin of profit on sale of different products;
- Inventory levels of raw materials and of finished products valuation method adopted for valuation of inventory and
- Utilisation of capacity, breakness point, cash flow from business operations.

(e) Accrued expenses

Accrued expenses are those which have been incurred but not paid. These are short-term liabilities. These include creditors for various services rendered by them to the enterprise.

(f) Proposed dividend

Proposed dividend is declared at the time of Annual General Meeting (AGM) of a company. As soon as the dividend is declared it becomes liability of the company. Often a company may not have ready cash to make the payment of dividend proposed. Payment of proposed dividend therefore may take some time.

(g) Tax-payment-due

Any tax which is due for payment within a period of one year is current liability.

(h) Short-term loans

The industry can borrow from various banking and non-banking sources for short period of time. Among non-banking sources, deposits from public (called as 'public deposits') can be accepted by the companies for short as well as long-term needs. The companies (Amendment) Act 1974 added sections 58-A and 58-B to the Companies Act to regulate the acceptance of deposits from public by various companies.

Reserve Bank of India Amendment Act 1974, gives power to the Reserve Bank of India to regulate the terms and other aspects of public deposits.

A List of Composition of Working Capital Management.

Current Assets	Current Liability
1) Stock of raw materials, cost, work-in-progress, finished goods.	1) Non-refundable, non-interest bearing advances against subscriptions to shares.
2) Cash in hand	2) Sundry creditors for goods and expenses
3) Cash imprest	3) Income tax deducted at source from contractors.
4) Advances recoverable in cash or kind or for value to be received	4) Expenses payable
5) Balances with Scheduled banks in current account	5) Amount due to a promoter of industry
6) Pre paid expenses	6) Interest accrued but not due on secured loans from financial institutions
7) Security deposits with Electricity Board, Telephone Department Balances with customers port, Trust, etc.	7) Unclaimed dividends
8) Miscellaneous stores, loose tools and implements goods in transit	8) Provisions for taxation, dividend proposed, contingencies
9) Advance payment of income tax, credit certificates	9) Security deposit
10) Deposits under the industries (Surcharge on Income tax) Scheme, 1976.	10) Dealer's deposit
11) Debts outstanding for a period exceeding 6 months	11) Liabilities for Bills discounted
12) Excise Duty and Sales tax recoverable	12) Bank overdraft
13) Balances with Central Excise Authorities	13) Acceptances
	14) Dividend Warrants but not encashed

=====

For proper appreciation, a closer look at the individual composit items of working capital is necessary.⁶

4. FACTORS DETERMINING THE WORKING CAPITAL MANAGEMENT

A wide variety of factors influence the total investment in working capital in an enterprise. These factors keep shifting in emphasis so that their impact on working capital levels vary from time to time. Significant among them are :-

1) Promotional and formative phase

The start up of a new project and initial years constitute the most crucial phase for planning and provisioning of working capital funds. In practice, however, this fact is generally overlooked and as a result, many new ventures run into financial rough weather in their early operating years.

2) Position of business cycle

The credit terms granted to customers influence the working capital level by determining the level of investment in book debts. Conventions and practices relating to specific industries very often dictate the nature, extent and duration of credit to customer. But in most cases, management has the discretion to decide on suitable credit policy relevent to each customer based on the merits of his case.

3) Vagaries in supply of raw materials

Certain raw materials pose problems in the matter of procurement and holding. Their sources may be few and irregular.

They may, therefore, be less amenable to the discipline of planned inventory management. The enterprise may feel compelled to purchase and carry large reserves of these items to sustain smooth flow of production. Inventory levels rise, as a consequence, using up more funds.

4) Shifts in demand for products

Some manufactured products are subject to seasonal fluctuations in sales. There are obvious difficulties in trying to match production tempo to the ebb and flow of the seasonal demand pattern. Pressurised production in peak load periods will be very expensive and relative inactivity in lean periods will be even more expensive, since employment and facilities will have to be sustained without corresponding output being obtained.

5) Production policies

While noting that companies which experience strong seasonal movements have special working capital problems. A strategy of steady rate of production being maintained throughout the year as against a pronounced seasonal demand for manufacturing goods was considered. The problem was one of finding funds to support the mounting inventory levels of finished goods until they got off-loaded in the peak season.

6) Competitive conditions

A company which enjoys a dominant hold on it's market feels little obliged to strain beyond a measure in satisfying

customers requirements. It can afford to restrict the variety of its products and thus reduce the aggregate levels of inventories. It can, with equal facility tighten up its credit standards and save on investments in book debts.

7) Growth and expansion programmes

As business grows, additional working capital has to be found. There is no simple formula to establish the link between growth in sales and growth in working capital or current assets. The critical fact, however, is that the need for increased working capital funds does not follow the growth in business activity but precedes it. Advance planning of working capital is thus a continuing necessity for a growing concern or else the company may have substantial earning but little cash.

8) Profit levels

By the very nature of things, some enterprises generate high gross margins compared to others. The product category and the firms position in market may have conferred this advantage. Others may have to struggle in a highly competitive environment, demanding the best of organisation and skills, to make gains.

9) Taxation

Tax liability is an inescapable element in working capital planning. It is a short-term liability payable in cash. Advance tax may have to be remitted in instalments, the computation being based on projected profits for the year. Tax is the first

appropriation out of profits and the amount of tax is determined by prevailing tax regulations and is not left to the discretion and convenience of the enterprise management.

10) Dividend policy

Management is impelled to preserve cash resources and at the same time it cannot pull away from its obligation to satisfy investor expectations. Market prestige for the shares of the company has also to be nurtured and maintained in its long run interests. When the profit after tax forms a thin spread, the management finds itself in a difficult position. Often changes in working capital bring about an adjustment of dividend policy.⁷

11) Reserve policy

One of the cherished goals of enterprise management is to build up adequate reserves out of profits. Besides cash or funds position the urge to retain or plough back profits often acts as a major constraint on the dividend policy. In concern function well, the built up reserves constitute the strong base on which the corporate growth and expansion has been sustained.

12) Depreciation policy

Depreciation policy centres around the determination of the amount to be provided as depreciation charge to make up the ultimate resource for replacement of worn out or absolute assets. Whether this is really so is a moot point but that is the broad objective.

13) Price level changes

The shifts in price levels over the years have always succeeded in clouding the vision of the finance manager. The financial experts, all over the world, are still debating and endeavouring to spell out the right way to resolve the enigma of changing price levels.

14) Operating efficiency

There is an obvious relationship between the operating efficiency of a company and its working capital position. Aggressive management loses no time in finding ways to offset the adverse effects of raw material price increases, increased labour rates and another factors outside the purview of corporate control.

15) Nature of business

The nature of business has an important bearing on its working capital needs. For some ventures, such as retail tobacco manufacture, construction companies, etc. the fixed assets become nominal or incidental and they require an abundance of working capital. At the other extreme, are some public utilities such as electricity generation and supply, where the fixed assets constitute the dominant segment, the current assets playing a minor and secondary role.

16) Manufacturing cycle

An extended time span, between the raw material purchase and the completion of the manufacturing process yielding the

finished product, will obviously mean a larger tie-up of funds in the form of enhanced working capital needs. A relation of this aspect can trigger off management action to contain the intervening period and effect economy in working capital needs.

17) Credit terms to customers

The credit terms granted to customers influence the working capital level by determining the level of investment in book debts. Conventions and practices relating to specific industries very often dictate the nature, extent and duration of credit to customers.

5. FINANCING OF WORKING CAPITAL

Financing of working capital involves :-

- (a) Formulation of alternative financing policies and
- (b) Choice of the most suitable financing policy from amongst different alternative financing policies.

All the sources of finance are conveniently grouped into two classes : (i) Long-term sources, and (ii) Short-term sources.

Working capital financing policy is concerned with the mix of these two sources in the total funds.

The mix of long-term and short-term sources should be guided by : (a) the trade-off between risk and profitability and (b) the costs alternative combinations of short-term and long term sources.

There could be different working capital financing policies from the point of view of risk profitability and cost. The ideal policy is that which is least costly, least risky and most profitable. However, the ideal policy cannot be practised in real market situations. Therefore, management of a industry has the task of striking a suitable balance or compromise among the three variables. For evolving and implementing working capital financing policies suitable to the conditions and constraints of a firm, certain generalisations are available. These generalisations serve as guidelines, and are given below.

- (i) Using only long-term finance is the most costly in terms of interest rates and creation of surplus cash. It is the most conservative policy as it provides highest possible degree of certainty of finance.
- (ii) Using only short-term finance is the most risky in terms of certainty of availability of funds on continuing basis. It is probably the least costly in the short-run and the most profitable.

Choice of a particular financing strategy between the above mentioned two extremes is influenced by the following factors.

- (a) The approval of creditors and capital market for the relative proportions of short-term and long-term sources in total working capital requirements. This approvals is reflected in the actual ratios of the two sources in financial statements of firms in an

industry and in all the industries. Reserve Bank of India Bulletin and the Economic Times publish studies on analysis of financial statements from time to time. These studies help in knowing the ratio of short-term and long-term sources for a particular industry, and capital market.

(b) The condition of money and capital market - If the market for selling debentures bonds and equity shares (the commonly used long-term sources) is in depressed condition, there is no choice than to raise funds from short-term sources.

(c) The composition of current assets - If a firm has such non cash current assets which are quickly convertible into cash, the firm may rely more upon short-term sources than upon long-term sources.

(d) Recent use of a source - If a industry has incurred heavy capitals expenditure financed by long-term sources in the recent past, then such a industry has no other choice than to finance increases in current assets by short-term borrowings. Contrary to this situation, if a firm has used short-term sources to finance purchase of long-term assets in the recent past, it has to raise funds from long-term sources to repay short-term loans, and finance increases in current assets in near future.

(e) Management attitude towards risk associated with a source of finance - Subjective opinions on raising funds from long-term and or short-term sources are important in decisions on financing

working capital requirements. However, this does not mean that managements subjective opinions are not based upon facts of past. Rather these are formed taking into consideration forecast for cash inflows and outflows (cash budget). Funds from business operations (profit and Loss account) and financial position (Balance sheet), conditions in the capital market, banking situations, fiscal and monetary policies. And these forecasts use past data as the basis subjective opinions guide the management in undertaking risks of using a source of funds for financing working capital requirements.

The shareholders or owners have to provide a share of the total investment in fixed and current assets. This is required from the point of view of risk sharing. The bases on which these funds are attributed to application in fixed assets and current assets or the question whether funds of needed for long term investment in fixed assets should only come from long term borrowings or should they investments in current assets be met from short term borrowings are some of the questions that arise in connection with the source use to tie up of funds.

Normally financing arrangements are planned for a combination of needs including capital expenditure and working capital investment. The asscrtment of sources of funds forms a package and rarely will it be possible to connote up a particular source to a specific application or use. At the same time, the finance



Manager does make an assessment of the investment needs for fixed as well as current assets and decide on a proper mix of long and short term fund. Taking note of internal generation of funds for the period in question, he takes decisions on the extent which he would resort to issue of shares or long and short-term borrowing to mobilise the required resources. He has a range of sources to choose from and cash has given cost. He has to select the most economical combination of sources, generally taking in time with the variations in time scale relevant to different specifications contemplated.

Application of permanent or long-term sources to short term uses does not place any major problem except that it may prove expensive if interest charge have to be paid for extended periods. Whether the funds are actively employed or not but diversion of funds from short-term sources to long-term application such as purchase of plant and equipments is bound to lead to liquidity problem. Banks and financing institutions frown upon this tendency on the part of their clients companies.

The proportion in which current assets are financed by short-term obligations as distinct from long-term sources varies from company to company and this is a decision area for the finance manager.

Where the commitments are firm but cash flows are not clearly predictable, it would be wise to cut down drastically the number and extent of short-term debts to manageable levels

and prefer longer maturity schedules for debts. This raises the question of scope for drawing on long term sources of support investment in current assets without adversely affecting profitability. The need to repay a short term loan, to be almost immediately followed by another short-term borrowings can be averted to the extent that a constant maximum level of investment in current assets is continuously to be maintained. Funds from long term sources can be employed for this purpose continuously, without giving rise to idle or redundant funds for seasonal needs short term debts can be had. Even here to take care of vagaries in cash flow, a part of funds required may be obtained from sources with longer maturity schedule. This provides for a better margin of safety. There will be favour there acts to the liquidity position of the company.

Another way to provide the required margin of safety is to increase the level of liquid assets, in the form of cash to marketable securities.

Profitability considerations point to use of short-term finance, to a reasonable extent short-term liability has the advantage of flexibility in that, it can be directed to raise or fall with changing needs. Thus, unused surplus funds can be kept at the bare minimum of financing cost saved. The degree of profitability increases as the proportion of current liabilities to total liabilities rises. Extending this logic to its extreme limits the company may attain a stage where current liabilities

exceed current assets. It will thus be left with a negative working capital. This is a stage where the over enthusiastic track on the road to profitability leads to the brick of insolvency. The determination of the right level to short-term liabilities suited to the company's activity and needs involves a trade off between profitability and risk.

It has to be examined whether the preference for increasing dosages of long-term and permanent sources to finance investment in current assets funds justification considering the use implications based on the characteristics of current assets as investment centres.

In a typical concern, the major part of current assets is not in cash from it is unlikely to be so at any given point of time. In actual operations, the current assets and cash component of it, are subject to repaid and continuous pace of replacement. At each item moves forward on its journey towards final conversion into cash its place is promptly taken up by another except possibility in periods of felling activity.

Over a period of time, there is a constant or minimum level, above which the current assets continue to stay. There may be ebb and flow or rise and fall within a range above this constant level caused by seasonable business conditions. In effect this minimum level of current assets that has in a sense, an attribute to fixing can be regarded as the 'hard core' or the

fixed working capital. It is also referred to as constant working capital or permanent working capital.

Another assumption is that for the seasonal needs of 'net variable working capital' the swings are predeterminable to a degree where a heading approach can be adopted, filling to in borrowing and payment schedule, for short-term financing to these anticipated savings. Rarely does business operate under such conditions of certainty as to permit perfect synchronisation of the schedule to anticipated cash flows and the payment schedule of short-term debt. Risk and uncertainties will cause shifts in expected cash flows aspecting payment commitments. The way to overcome this risk and embarsament is to have increased monoem-rability.

The management's risk preferance will vary from company to company and will influence the choice as to duration of maturity schedule for debt subject. Of course to the fact that it will be expensive to saving abruptly to long-term sources to meet seasonal short-term needs. But it will be advisable to finance the permanent requirements of fixed assets and the net purmanent current assets and a part of the seasonal short-term needs, through permanent and long-term finance.

If the expected cash flow materialised there will be some surplus funds on hand during the seasonal thoughts and these can be profitability deployed as short-term investments in marketable securities extended maturity schedules for payment of debt

and short-term investments of temporary surplus funds provide the much needed margin of safety minimising risk and optimising profitability.

Examining the purpose direction of commercial bank lending in the country, the national credit councils study group No.2 appointed in October 1968, came out with its report known as the Dehejia Committee Report, highlighting the shortcomings of the prevalent cash credit system of bank lending to including industry. It concluded that the security oriented approach to lending had resulted in over financing of industry in relation to production 'trends'. The study group found that while theoretically commercial bank lending was for short-term purposes the fact was not so.

A big chunk of bank lending was actually long-term in character and the basic assumption of the cash credit being repayable on demand was a more function. Most of the cash credit accounts revealed an element of 'hand care' borrowing in the sense that the cash credit accounts never fall below a certain level during the course of a year and to this extent there was a quick permanent lock-up of bank funds in borrower's business. The Dehijia Committee held that the 'hard care' borrowing should be repaid by the borrowers as early as possible but this has so far remained an unfulfilled expectation.

The study group to frame guide lines for follow-up of bank credit constituted by the Reserve Bank credit constituted

by the Reserve Bank in July 1974, known as Tondon Committee, further examined this principle that the 'hard core' part of current assets requirements should be financed by industry out of equity and for out of long-term borrowings from term financial institutions. It was represented that the present state of capital market was such that there were not prospects in the foreseeable future of raising substantial funds through equity to finance the 'hard core'.

The rate of plough back of earnings was also inadequate to provide the required resources. The term financing institutions also took a clear stand that they would not undertake the responsibility to provide the funds for the 'hard core' as this would inevitably tie-up their resources in financing old units, instead of furthering their objective of financing the promotion of new industrial activity. Chore Committee in its report submitted recently has reinforced the (1980 following) recommendations.

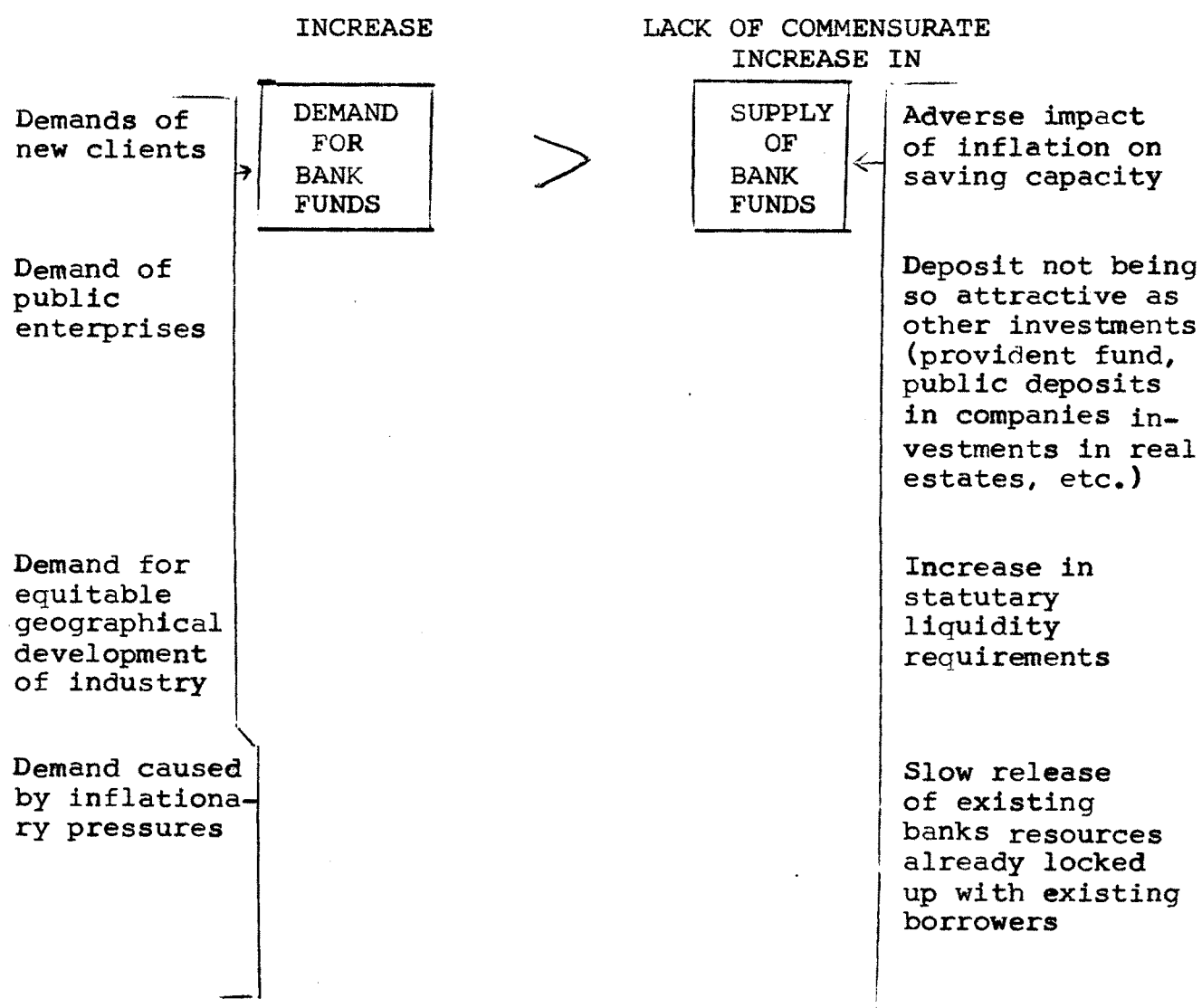
Some of the important guidelines of chore committee are regarding the system of cash credit by commercial bank are :-

- 1) Borrowers should submit quarterly projections and cash credit limits.
- 2) The bank while assessing the credit requirements from borrowers should fix separate limits wherever feasible.
- 3) As far as possible the borrowers should be discouraged from approaching the bank frequently for temporary limits in excess of sanction limits.

- 4) Suitable provision should be made for charging of penal rate of interest in the event of any difficulties in the timely repayment of the working capital loan.

Tondon Committee observed the following weakness of existing style of credit.

- (a) The level of advances in a bank was not determined by the capacity and policy of a banker to lend. It was determined by the decision of the borrower. Banks therefore were less able to plan their investments under this type of cash credit system.



(b) For most of the time, banks faced difficulties in matching the availability of funds with the needs for funds. The imbalance between availability of funds and demand for funds persisted often. It was like a sea-saw game. To quote the report of Tondon Committee, 'when the borrower's needs for funds is low, the banker is faced with the problem of large utilized funds, and when the borrower's need for fund rises the banker faces the problem of meeting the demand without notice'. The situation during 'busy' winter months is an example. Customers need more funds, banks have less lendable resources during this period.

(c) During a period when banks have low credit deposits ratio, unplanned, erratic spurt in credit demand can be managed by banks. But such demand cannot be managed easily when credit deposit ratio is high.

(d) It was often found that the amount of credit limits sanctioned was larger than the amount of total deposits mobilised. This practice overlooked the liquidity requirement of banking system. This practice made some of the monetary measures taken by Reserve Bank of India, less effective.

6. INVENTORY MANAGEMENT

Inventories mean stock of finished goods and raw materials, goods-in-process, goods-in-transit, and supplies, spares and components.⁸

Inventories are the stocks of the product a company is manufacturing for sale and the components that make up the product.

The various forms in which inventories exist in a manufacturing company are as follows :-

- a) Raw materials and supplies (consumable)
- b) Work-in-progress (convertable)
- c) Finished goods (saleable)

The above may be considered to be the 'operational' definition of inventory. In financial parlance, inventory is defined as the sum of the value of raw materials and supplies including spares, semi-processed materials or work-in-progress and finished goods. The nature of inventory is largely dependent upon the type of operation carried on. For instance, in case of a manufacturing concern, inventory will generally comprise all the three groups mentioned above while in case of a trading concern it will simply consist of stock-in-trade or finished goods.

Objectives of inventory management

Generally large amounts remain invested in inventories. But there should be optimum level of investment for any asset, whether it is a plant, cash or inventories. Again inadequate inventories will disrupt production and lose sales. All this calls for an effective inventory management programme. The main objectives of inventory management will, therefore, be :-

- 1) To insure that materials are available for use in production and production services as and when required.

- 2) To ensure that finished goods are available for delivery to customers to fulfill orders.
- 3) To minimise investment in inventories.
- 4) To protect the inventory against deterioration, obsolescence and unauthorised use.

It goes without saying that inventory management is not possible by any isolated and sporadic effort. If the same is to be achieved, it needs action by all the departments concerned.

It includes -

- a) Materials department (purchase, store keeping, material control and disposals).
- b) Quality control and inspection.
- c) Marketing and sales.
- d) Users departments such as production, maintenance, operation, construction, etc.
- e) Finance, accounting and internal audit departments.
- f) Design, research and development.
- g) Industrial/Standards Engineering.
- h) Computer/Data processing centre.

Scientific Inventory Management Techniques

The following problem areas comprise the heart of inventory control and any scientific approach to inventory management should take care of them.⁹

- (a) The classification problem

- (b) The order quantity (how much to order) problem;
- (c) The order point problem (when to order) and
- (d) Safty stocks.

The various techniques that are available to solve the above types of problems are now discussed one by one.

The Classification Problem

ABC Analysis (Always Better Control) :

Any effective inventory control system will not have all items in the inventory treated in the same manner under the same control techniques. The classification is made on the basis of annual consumption value of inventories. In other words, all items of materials in respect of which the total value of consumption is substantial are classified as 'A' items. On the other hand, 'C' items represent those items in which case the value of consumption is comparatively insignificant. 'B' items fall midway between 'A' & 'C' class items. On the basis of physical quantities and value of materials used, a table, as follows may be constructed.

Inventory items	Percentage of total items	Percentage of total value
A	10	75
B	20	15
C	70	10

This technique of inventory classification and control is often called as ABC Analysis or Proportional parts Value Analysis.

The ABC Analysis can also be graphically shown as in Fig.2.1.

Inventory Cycle :

Before considering the EOQ Model it may be helpful to get an idea of inventory movement by means of graphical presentation (Fig.2.2). If demand on inventories are regular, the inventory movement may appear as follows.

It is assumed that the Ordering Quantity (Q) is 6,500 units. Therefore, on receipt of an order, 6,500 units are in stock. The usage or sales rate is 500 units per week over the period (i.e. even demand). So units are drawn by this quantity per week. The steps represent the actual withdrawals, shown approximately as a straight line. Thus, actual quantity held in inventory will vary from 6,500 units (just on receipt of an order) to zero (just before an order arrives). On average units held in inventory will therefore be $\frac{Q}{2}$ i.e. 3,250 units.

Economic Ordering Quantity (EOQ) :

The EOQ is taken at that level where the cost of carrying approximately equals to cost of not carrying. At this point total cost is also minimum. The EOQ function is illustrated in Fig.2.3.

In Fig.2.3, the ordering costs, carrying costs and total costs are plotted. While carrying costs tend to vary directly with the size of the order, ordering costs line declines first when fixed costs of ordering are spread over more units. Subsequently, it begins to rise when the decrease in average ordering costs

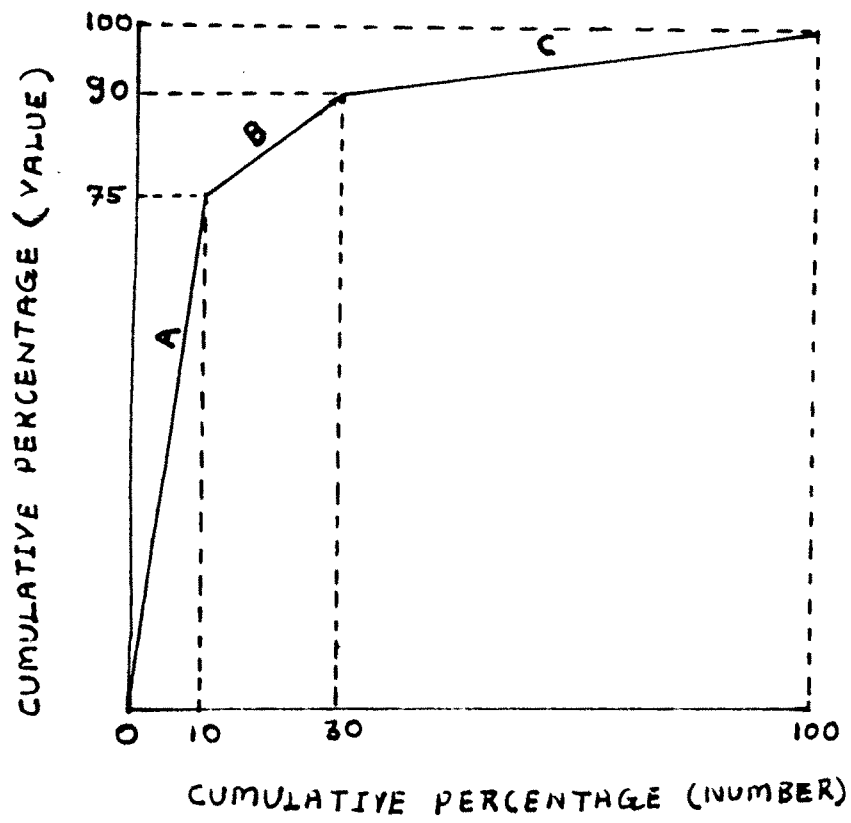


Fig. 2.1 ABC Analysis Graph

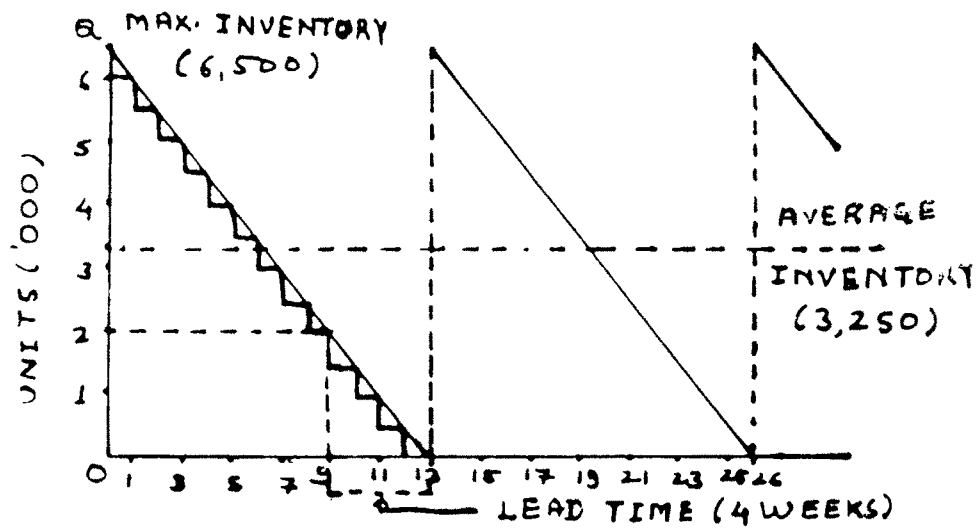


Fig2.2 Inventory cycle.

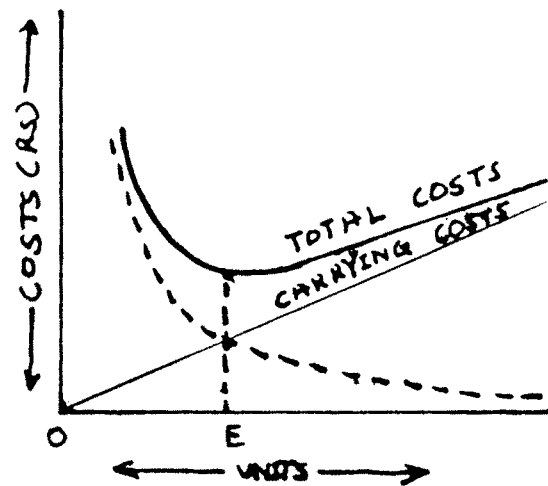


Fig. 2.3 Economic order Quantity.

is more than offset by the additional carrying costs. Thus point 'E' represents the optimum order, which minimises the total costs of inventory management.

7. MANAGEMENT OF DEBTORS

The term debtors is defined as 'debt' owned to the firm by customers arising from sale of goods or services in the ordinary course of business. Debtors or Receivables are asset accounts representing amounts owed to the firm by customers from sale of goods or services. It has to be mentioned that the credit that is granted to customers is done in the ordinary courses of business. It is done on open account in the sense that no formal acknowledgement of debt obligation is required. In fact, credit sales which lead to debtors are treated as one of the marketing tools.

The objectives of maintaining debtors can be identified as follows :-

a) Achiving growth in sales and profits

If a firm allows credit sales, it will usually be able to sell more goods or services than if it insists on immediate cash payment. Similarly additional sales normally results in higher profits for the firm. This proportion will hold good only when the marginal contribution or gross margin is greater than the additional costs associated with administering the credit policy.¹⁰

b) Meeting competition

To survive in the competitive market, firms have to establish credit policies similar to those of competitors. Thus by adapting its terms of trade to the industry norms a firm will avoid loss of sales from customers who would buy elsewhere if they did not receive the expected credit.

Costs of maintaining debtors

Credit sales, and hence maintenance of debtors, involve certain costs. They are :-

- (a) Cost of financing debtors,
- (b) Collection costs,
- (c) Delinquency costs and
- (d) Default costs.

(a) Cost of financing debtors

Debtors tie up a portion of firm's financial resources. The resources may be financed from one of the following three sources : i) Share capital ii) Retained earnings and iii) Debt capital (long term and/or short term).

In any of the above case, the firm incurs a cost for the use of the funds.

(b) Collection costs

These costs are those which have to be incurred in connection with collection of credit sales. It, therefore includes

i) Administrative expenses of running the credit and collection department ii) Expenses incurred to obtain information regarding credit worthiness of potential customers and iii) Costs of additional steps to increase the chances for eventual payment.

(c) Delinquency costs

When payment is not received on time in respect of debtors, the costs involved are known as delinquency costs which include the following.

- i) Cost of financing the debtors for the extended period.
- ii) Cost of additional steps to collect the over-due debtors
i.e. hiring personnel or collection agencies to visit the delinquent customer and demand payment, legal expenses, etc.

(d) Default cost

When over-due debtors cannot be collected inspite of serious efforts, a firm may be forced to write-off the claim. Default cost is therefore, in the nature of bad debt loss on debtors account. Firms generally make provision for bad debt losses in the normal course of business based on past experience, credit reputation of the customers and so on. Generally, the amount of default cost increases more than proportionately in relation to increase in credit sales. This is partly due to the fact that with an effort to increase credit sales, high risk customers may be included. The incidence of default cost has an influence on the credit position of a firm.

Average Age of Debtors

The average age of debtors is a test of speed with which debtors are converted into cash.¹¹ Accordingly, it indicates the efficiency or otherwise with which credit granted to debtors is managed. It is calculated by the simple equation.

$$AA = \frac{AD}{ACS}$$

Where, AA = Average age of debtors

AD = Average debtors (i.e. opening draft closing debtors/2)

ACS = Average credit sales i.e.

$$\frac{\text{Credit sales for the period (CS)}}{\text{Accounting period (AP)}}$$

$$\text{Thus, } AA = \frac{\frac{AD}{CS}}{AP}$$

$$\text{Or } AA = \frac{AD}{CS} \times AP$$

8. CASH MANAGEMENT

Cash is the common purchasing power or medium of exchange. As such, it forms the most important component of working capital. Not only that, it largely upholds, under given conditions, the quantum of other ingredients of working capital viz. inventories and debtors, that may be needed for given scale and type of operation.¹²

Commonly speaking, cash refers to state and bank money which are compulsorily used as legal tender. It also includes

bank deposits withdrawable by cheques on demand. Sometimes, cash, is used to describe all assets that form the cash fund. The cash fund consists of capital in the form of cash or equivalent assets available at management's discretion for meeting obligations as they mature or for investment in operating assets. Included in cash fund are cash on hand, bank deposits, gold bullion and temporary investments made as a means for holding cash until it will be needed. Such investment can be converted to cash without material delay or loss to meet obligations for payments. While some income may be derived from assets in the cash fund, capital is ordinarily not held in this form for its earnings because the rate of return is substantially lower than that realised from capital invested in most other business assets.

However, the word cash is taken in a narrower sense in that it includes only state and bank money in hand and bank deposits withdrawable by cheques on demand; it has not been taken in the wider sense as in the case of cash fund, as described above. There is no denying the fact that most of the current assets, like receivables, inventories, etc. are sooner or later, converted into cash. But it is considered wise to deal with them in their own individual identities as and when necessary rather than associate their problems with the problem of cash management.

Self imposed balance

It is determined by considering factors like the need for cash, the predicatability of this need, the interest rate on

marketable securities or the borrowing rate, and the fixed cost of effecting a loan transaction as the case may be.

The various models used for determining the self-imposed balance are as follows :-

- (a) Operating or Cash cycle model
- (b) Inventory model
- (c) Stochastic model
- (d) Probability model

(a) Cash cycle model

It may however, be mentioned that the higher the cash turn-over (i.e. the number of working days in a year divided by the O.C. period) the lower will be the requirement for cash and vice-versa. The minimum level of operating cash needed by a firm is determined by dividing the firms total annual outlays by its cash turn-over rate. Alternatively, it can be stated that, other things remaining constant, the lower the operating cycle the lower will be the need for operating cash balance and vice-versa.

(b) Optimum cash balance using inventory model

The EOQ model also provides a conceptual foundation for cash management problem. If a firm maintains too small a cash balance (for transaction purpose) it runs out of cash i.e. costs of running short of cash. The elements of these short costs are i) cost of passing up trade discount ii) cost of passing up quantity discounts iii) cost of becoming delinquent iv) cost of failure to meet payroll on time or to make interest and principal payment when due.

The optimum cash balance is problem of balancing cost of carrying and that of not carrying. That is optimum cash balance is that level where the cost of carrying approximately equals to cost of not carrying. At this point total costs i.e. the sum of opportunity or borrowing cost and short and transaction costs, are also at a minimum (Fig.2.4).

Opportunity of borrowing costs tend to vary directly with the size of the cash balance while trasactions etc. Costs are high with low cash balance and they gradually decline with the gradual increase in cash balance. Point 'K' represents the optimum cash balance which minimises the total costs of management.

(c) Stochastic model

If the future is not known with certanity, application of EOQ model does not become effective. Accordingly attempt has been made use other model's to determine the optimum behaviour when demand for cash is stochastic and unknown in advance. The control theory can be applied if cash balances fluctuate widely. The control limits can be set such that when cash reaches an upper limit a transfer of cash to marketable securities is consumated and when it hits a lower limit a transfer from marketable securities to cash is triggered.

(d) Probability model

It may be stated that the EOQ assumes predicatable cash flows while the stochastic model is based on random cash flows. But in practice, cash flows are neither completely predictable nor

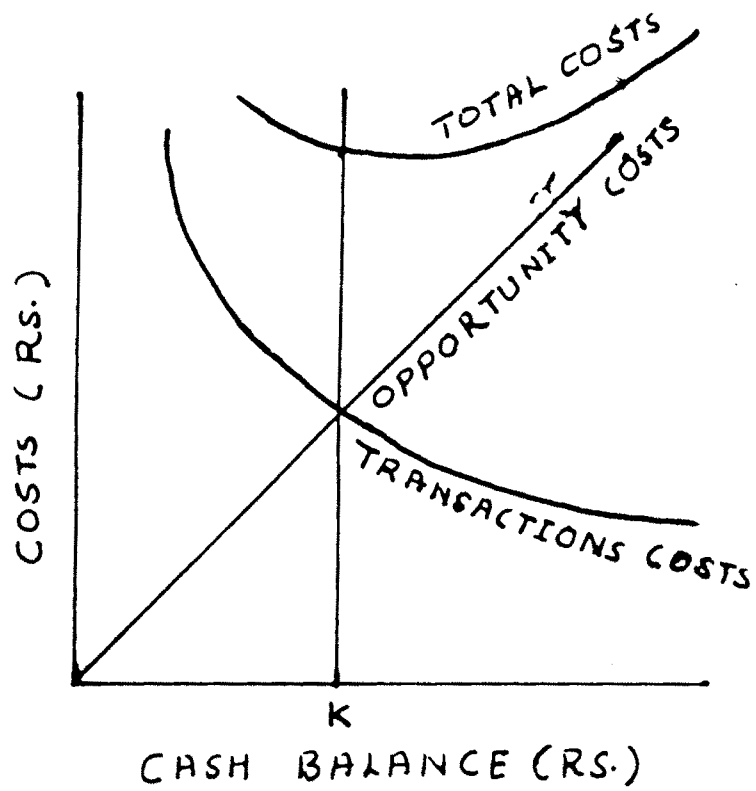


Fig. 2.4 Optimum Cash Balance

stochastic. They are rather, predictable within a range. In that case probability distributions may be used for a range of possible outcomes and optimum cash balance may be accordingly ascertained.

Objective of Cash Management

The main objective in managing cash is to trade-off liquidity and profitability in order to maximise long run profits.¹³

The larger the cash balance, the greater the degree of liquidity, the less the profits earning potential of the firm. The less the cash balance, the less the degree of liquidity, the more the profits earning potential of the firm.

The main objective of cash management is as follows.

- 1) to meet requirements of day-to-day business operations,
- 2) to provide for scheduled major payments,
- 3) to exploit possible opportunities for advantageous long-term investments,
- 4) to trace unexpected drains of cash,
- 5) to meet requirements of bank relationship,
- 6) to build image of credit worthiness,
- 7) to earn directly on cash balance,
- 8) to create reservoir for net in flows of cash till the availability of the better uses of funds by conscious planning.

Measures of operating liquidity

The current ratio and the acid test ratio have been introduced as measures or indicators of general short-term liquidity and credit worthness. There are other methods too, to measure operating liquidity.

One such method, which endeavours to measure the efficiency with which cash being employed to support the company's operations, is the ratio of 'cash balance' to 'total current assets'.

$$\text{Cash in current assets} = \frac{\text{Cash balance}}{\text{Current assets}}$$

The trend of this ratio during previous years can provide some guidance as to the desirable level of the ratio. Inter-firm comparisons and industry averages can also aid in the choice of an acceptable ratio of cash to current assets for planning the cash balance. A large ratio can be interpreted to mean unduly high liquidity and poor cash management.

Another approach may be measure the velocity with which cash moves through the company's operations; as reflected in the sales for the period. The aim is to measure the number of times the opening cash balance is turned over in sales during the given period.

$$\text{Cash turnover in sales} = \frac{\text{Sales for the period}}{\text{Opening cash balance}}$$

If the nature of the business entails a low rate of turnover of cash in sales, it will follow that the initial and the sustaining cash balance will have to be relatively large. On the other hand, if cash velocity in sales is high, the activities can be sustained by relatively smaller cash balance, making for effective and efficient use of cash and also for improved liquidity. What is the desirable rate of turnover of cash in sales ? No standard answer can be provided for this question. Past trends and attainments, industry averages and inter-firm comparisons can provide some useful indications.

9. MEASUREMENT OF OPTIMUM LEVEL OF WORKING CAPITAL

The overall position of working capital is analysed by outside parties as well as by the management of the firm. The interested outside parties include trade creditors, banks and financial institutions, debenture holders, and existing potential shareholders.

The objectives of analysis of working capital position are to evaluate solvency liquidity and cost of financing.

The major tools for analysing working capital position are ratios.

- A) Ratios
- B) Sources and uses of funds (fund flow statements) and
- C) Management information report for working capital.

The optimum level of working capital can be determined only with reference to the requirements of a particular undertaking.

This is measured by two important indicators i.e. current ratio and acid test ratio.

A) Ratios

Some commonly used ratios are briefly described :

i) Current Ratio

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

It is the ratio of the current assets and current liabilities and is found out by dividing the current assets by the current liabilities.¹⁴ This ratio indicates the ability of the firm to meet its debts (solvency). The higher the ratio, the more liquid the firm. However, a higher ratio often indicates lower profitability.

The current ratio is computed by dividing current assets by current liabilities. Current assets normally include cash, marketable securities, sundry debtors (account receivables) and inventory and current liabilities consists of sundry creditors (current account payable). Short-term loans and advances (including cash credit facilities taken from commercial banks, current maturities of long-term debts) current liabilities and provisions for taxes and other accrued expenses. This ratio is generally on acceptable measures of short-term solvency as it indicates the extent to which the claims of short-term creditors are covered by assets that are likely to be converted into cash in a period corresponding to the maturity of the claims.

This relationship is of prime importance to the short term creditors since it gives an indication of a borrower's ability to meet his current obligations. It should however, be borne in mind that current assets, are not source of funds to meet current liabilities. A firm can borrow from new creditors repay the old. In interpreting this ratio, consideration should be given to the proportion of the various components of current assets. A current ratio of 2:1 has long been considered generally satisfactory but indiscriminate use of this standard is unsound. This ratio varies from industry to industry and within the same industry from company to company and within the same company from season to season.

ii) Quick - assets ratio (Acid-Test Ratio)

$$\text{Acid Test Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

This ratio is determined by dividing 'Quick Assets' i.e. cash marketable investments and sundry debtors, by current liabilities.

This ratio is a better test of financial strength than the current ratio as it given no consideration to inventory which may be very slow moving. It is supplementary measure of liquidity and places more emphasis on immediate conversion of assets into cash does the current ratio.

A quick ratio of 1:1 has unusually been considered favourable since for every rupee of current liabilities there is a rupee

of quick assets. But account receivables may not be convertible into cash at face value on short notice. Like current ratio a reasonable standard for the acid-test ratio varies from season to season in a company and from company to company in a industry.

The difference between the current ratio and Acid-test ratio is that inventories are omitted from the numerator. The reason is that it takes some time to relise inventories into cash. Under circumstances of forced selling, there may be loss also. Thus inventories are not immediately available to meet near future loans.

This ratio is a relatively more sensitive guide to immediate technical solvency.¹⁵

It suggested that while computing the amount of current liabilities, the over-draft facilities available to the firm should be included. This will make the ratio more sensitive.

iii) Daily Cash Flows

$$\text{Daily Cash Flows} = \frac{\text{Net profit} + \text{Depreciation}}{\text{No. of working days in a year}}$$

This is a crude ratio but useful for analysing the working capital position. It indicates the daily cash flow generation. It indicates the time period which will be taken in repaying the debt with the help of normal working of the firm.

iv) Debtor's Turnover Ratio

This ratio shows how many days credit is outstanding in the value of the amounts owing by debtors. It gives an indication of

the efficiency or otherwise of the credit and collection policies of the firm.

It is measured as follows :-

$$\text{Debtors Turnover Ratio} = \frac{\text{Average Debtors}}{\text{Average Daily Credit Sales}}$$

$$\text{Average Debtors} = \frac{\text{Opening debtors} + \text{Closing debtors}}{2}$$

$$\text{Average Daily Credit Sales} = \frac{\text{Total Credit Sales for the Year}}{365}$$

The turnover of debtor's ratio reveals the efficiency of the credit and collection department. If the length of time revealed is excessive compared with the average period of credit extended by the firm, proper enquiry should be made to improve the financial position by improving the debt collection.¹⁶

v) Creditors Turnover Ratio

This ratio measures the promptness or otherwise with which payment is made to creditors in respect of credit purchases. It is measured as follows :-

$$\text{Creditors Turnover Ratio} = \frac{\text{Average Creditors}}{\text{Average Daily Purchases}}$$

$$\text{Average Creditors} = \frac{\text{Opening creditor} + \text{Closing creditor}}{2}$$

$$\text{Average Daily Purchases} = \frac{\text{Total purchase for the year}}{365}$$

A low ratio indicates that the creditors are paid promptly thus enhancing the good will of the firm. A high ratio signifies the delay in liquidating the claims of the creditors. But an unusual delay may affect adversely the credit reputation of the firm. This will put the firm in difficulty as the suppliers will be reluctant to grant credit in future in the event of persistent default in the past.

B) Sources and uses of funds

The flow of funds in a firm may be conceived as a continuous process. For every use of funds, there must be an offsetting source. In general, the assets of a firm represent the net uses of funds, its liabilities and net worth represents net sources. Thus the various sources and uses of funds are :

Sources (in flows)	Applications (out flows)
<hr/>	
1 Trading profit or funds provided by operations	1 Trading loss or funds depleted by operations
2 Issue of equity and preference shares (including premium or excluding discount)	2 Redemption of redeemable preference shares (including premium or excluding discount)
3 Issue of Debentures (including premium or excluding discount)	3 Redemption of Debentures (including premium or excluding discount)
4 Long-term loan	4 Repayment of long-term loan
5 Sale of fixed assets	5 Purchase of fixed assets
6 Sale of investments	6 Purchase of investments
7 Non-trading incomes i.e dividend	7 Payment of dividend and non-trading items, if any
Total _____	Total _____
<hr/>	

The item of current liabilities and current assets have not been included in the above list of sources and uses of funds. Therefore if the total of funds received exceeds that of the funds applied, the difference is excess fund which will be represented by increase in working capital on the otherhand, if the aggregate of funds applied exceeds the aggregate of funds received, the difference is shortage in fund, represented by decrease in working capital. The position should, however, be viewed from the sources and applications of funds. In other words increase in working capital is taken as an application and decrease as a source of fund. It may be stated that increase in working capital means increase in 'net' current assets whereas decrease in working capital means increase in liability (current). As already stated increase in liability provides the channel, the source and increase in assets uses the fund i.e. the application.

C) Management information report of working capital (MIR)

Management information report for working capital management described here is an improvement over the conventional statement of changes in working capital which is prepared alongwith funds flow statement. It considered the concept of 'responsibility centre' and present information to assist heads of responsibility centres and the top management in monitoring the level of working capital.

The usual statement of 'changes in the working capital' does not provide the following information.

- i) The activity that caused an unfavourable change.
- ii) The amount of an unfavourable change.
- iii) The executive responsible for controlling unfavourable change.

Management Information Report for working capital basically uses the information provided in the statement of changes in working capital, but with some more details. The activities causing changes in working capital are grouped into the following five groups.

- (a) Material control activities
- (b) Production control activities
- (c) Commercial activities
- (d) Advances to employees etc. and
- (e) Other activities 17

R E F E R E N C E S

1. Upadhyay, K.M. (1985) : Financial Management. Kalyani Publisher, New Delhi. p.40.
2. Smith, Keith, Y. (1974) : Management of Working Capital : A Reader. West Publishing Co., New York, U.S.A. p.4.
3. Walker, E.W. (1974) : Essentials of Financial Management (2nd Ed.). Prentice-Hall of India Private Ltd. New Delhi. pp.59-60.
4. Gerstenberg, C.W. (1959) : Financial Organisation and Management. Prentice Hall, New York. p.282.
5. Mehta, D.R. (1974) : Working capital Management. Prentice Hall Inc., Engle Wood Cliffs New Jersey. p.2.
6. Ramamoorthy, V.E. (1976) : Working Capital Management. Institute for financial management and Research, Madras. p.8.
7. Kuchhal, S.C. (1969) : Financial Management. Indian Institute of Management, Ahmedabad. p.166.
8. Upadhyay, K.M. (1985) : Financial Management. Kalyani Publisher, New Delhi, Ludhiana. p.362.
9. Joy, M.O. (1977) : Introduction for financial management. Homewood, Irwin. p.469.
10. Hamptor, J.J. (1980) : Financial Decision Making, Hall of India Pvt. Ltd. p.206.
11. Banerjee, Bhabatosh (1984) : Financial policy and management accountancy. The World Press Pvt. Ltd. Calcutta. p.145.

12. Banerjee, B. (1982) : Cash Management, A Practical Approach.
The World Press Pvt. Ltd. Calcutta. p.1.
13. Michal, Firth (1978) : Management of Working Capital
Management. p.74.
14. Banerjee, Bhabatosh (1984) : Financial Policy and Management
Accountancy. The World Press Pvt. Ltd. Calcutta .
p.265.
15. Upadhyay, K.M. (1985) : Financial Management, Kalyani Publishers,
New Delhi, Ludhiana. p.111.
16. Banerjee, Babhatosh (1984) : Financial Policy & Management
Accounting. The World Press Pvt. Ltd; Calcutta. p.275.
17. Ratnam, V.V. (1977) : The management Accountant Vol.12 No.1.
Bharat Heavy Electrical Ltd. Calcutta. 1977. pp.87-88.