

**SYLLABUS****B.B.A. V SEM****Subject – Working Capital Management**

UNIT – I	Working Capital: Concept, Definition, types, Importance, Need and Objectives of Working Capital, Determinants of working capital, Excess working capital and inadequate working Capital, Disadvantages of Excess working capital and inadequate working Capital, Operating cycle — Concept
UNIT – II	Meaning, definition and nature of cash, Motives for holding cash, Cash Management, Meaning of Cash Flow, Determination of optimum cash balance, Cash Management Models, Management of Marketable Securities
UNIT – III	Concept and definition of receivables, cost of maintaining receivable, factors influencing the size of receivables, forecasting of receivables, objectives of receivable management, factoring and receivable management, types of factoring
UNIT – IV	Meaning and nature of inventory, purpose and benefit of holding inventory, risk and cost of holding inventories, objectives of inventory management, tools and techniques of inventory management
UNIT – V	Financing of working capital, determining the working capital financing mix, new trends in financing of working capital by banks, latest committees regarding working capital- Kannan Committee, Marathe Committee



## UNIT-I

### INTRODUCTION:

The uses of funds of a concern can be divided into two parts namely long-term funds and short-term funds. The long – term investment may be termed as ‘fixed investment.’ A major part of the long-term funds is invested in the fixed assets. These fixed assets are retained in the business to earn profits during the life of the fixed assets. To run the business operations short-term assets are also required.

The term working capital is commonly used for the capital required for day-to-day working in a business concern, such as for purchasing raw material, for meeting day-to-day expenditure on salaries, wages, rents rates, advertising etc. But there are much disagreement among various financial authorities (Financiers, accountants, businessmen and economists) as to the exact meaning of the term working capital.

### DEFINITION AND CLASSIFICATION OF WORKING CAPITAL:

Working capital refers to the circulating capital required to meet the day to day operations of a business firm. Working capital may be defined by various authors as follows:

1. According to Weston & Brigham - “Working capital refers to a firm’s investment in short term assets, such as cash amounts receivables, inventories etc.
2. Working capital means current assets. —Mead, Baker and Malott
3. “The sum of the current assets is the working capital of the business” —J.S.Mill

Working capital is defined as “the excess of current assets over current liabilities and provisions”. But as per accounting terminology, it is difference between the inflow and outflow of funds. In the Annual Survey of Industries (1961), working capital is defined to include “Stocks of materials, fuels, semi-finished goods including work-in-progress and finished goods and by-products; cash in hand and bank and the algebraic sum of sundry creditors as represented by

- (a) outstanding factory payments e.g. rent, wages, interest and dividend;
- (b) purchase of goods and services;
- (c) short-term loans and advances and sundry debtors comprising amounts due to the factory on account of sale of goods and services and advances towards tax payments”.

The term “working capital” is often referred to “circulating capital” which is frequently used to denote those assets which are changed with relative speed from one form to another i.e., starting from cash, changing to raw materials, converting into work-in-progress and finished products, sale of finished products and ending with realization of cash from debtors.



Working capital has been described as the “life blood of any business which is apt because it constitutes a cyclically flowing stream through the business”.

## CONCEPTS OF WORKING CAPITAL

There are two concepts of working capital viz. quantitative and qualitative. Some people also define the two concepts as gross concept and net concept. According to quantitative concept, the amount of working capital refers to ‘total of current assets’. Current assets are considered to be gross working capital in this concept.

The qualitative concept gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to “excess of current assets over current liabilities.”

L.J. Guthmann defined working capital as “the portion of a firm’s current assets which are financed from long-term funds.”

The excess of current assets over current liabilities is termed as ‘Net working capital’. In this concept “Net working capital” represents the amount of current assets which would remain if all current liabilities were paid. Both the concepts of working capital have their own points of importance. “If the objective is to measure the size and extent to which current assets are being used, ‘Gross concept’ is useful; whereas in evaluating the liquidity position of an undertaking ‘Net concept’ becomes pertinent and preferable.

It is necessary to understand the meaning of current assets and current liabilities for learning the meaning of working capital, which is explained below.

Current assets – It is rightly observed that “Current assets have a short life span. These types of assets are engaged in current operation of a business and normally used for short-term operations of the firm during an accounting period i.e. within twelve months. The two important characteristics of such assets are,

- (i) Short life span, and
- (ii) Swift transformation into other form of assets.

Cash balance may be held idle for a week or two, account receivable may have a life span of 30 to 60 days, and inventories may be held for 30 to 100 days.”

Fitzgerald defined current assets as, “cash and other assets which are expected to be converted in to cash in the ordinary course of business within one year or within such longer period as constitutes the normal operating cycle of a business.”



Current liabilities – The firm creates a Current Liability towards creditors (sellers) from whom it has purchased raw materials on credit. This liability is also known as accounts payable and shown in the balance sheet till the payment has been made to the creditors.

The claims or obligations which are normally expected to mature for payment within an accounting cycle are known as current liabilities. These can be defined as “those liabilities where liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current assets, or the creation of other current liabilities.”

Circulating capital – working capital is also known as ‘circulating capital or current capital.’

“The use of the term circulating capital instead of working capital indicates that its flow is circular in nature.”

### STRUCTURE OF WORKING CAPITAL

The different elements or components of current assets and current liabilities constitute the structure of working capital which can be illustrated in the shape of a chart as follows:

#### STRUCTURE OF CURRENT ASSETS AND CURRENT LIABILITIES

<b>Current Liabilities</b>	<b>Current Assets</b>
Bank Overdraft	Cash and Bank Balance
Creditors	Inventories: Raw-Materials Work-in-progress Finished Goods
Outstanding Expenses	Spare Parts
Bills Payable	Accounts Receivables
Short-term Loans	Bills Receivables
Proposed Dividends	Accrued Income
Provision for Taxation, etc	Prepaid Expenses Short-term Investments



### **CIRCULATION OF WORKING CAPITAL**

At one given time both the current assets and current liabilities exist in the business. The current assets and current liabilities are flowing round in a business like an electric current.

However, “The working capital plays the same role in the business as the role of heart in human body. Working capital funds are generated and these funds are circulated in the business. As and when this circulation stops, the business becomes lifeless. It is because of this reason that the working capital is known as the circulating capital as it circulates in the business just like blood in the human body.”

1. **Gross Working Capital:** It refers to the firm’s investment in total current or circulating assets.
2. **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. This is, as a matter of fact, the most commonly accepted definition. Some people define it 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.

**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. Tandon Committee has referred to this type of working capital as “Core current assets”.

Working Capital may be classified in two ways (Kinds of Working Capital)

- a) Concept based working capital
- b) Time based working capital
- c) Classification on the basis of financial reports.

### **CONCEPT BASED WORKING CAPITAL**

1. Gross Working Capital
2. Net Working Capital
3. Negative Working Capital

### **CONCEPTS OF WORKING CAPITAL**

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## 2. Net Working Capital:

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- ii. It is that portion of a firm’s current assets which is financed by long-term funds.

3. Negative Working Capital: This situation occurs when the current liabilities exceed the current assets. It is an indication of crisis to the firm.

## TIME BASED WORKING CAPITAL

1. Permanent or Fixed Working Capital
  - (a) Regular Working Capital
  - (b) Reserve Working Capital
2. Temporary or Variable Working Capital
  - (a) Seasonal Working Capital
  - (b) Special Working Capital

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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.





2. 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, receivable also increase and must be financed during 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.

Classification on the basis of financial reports –The information of working capital can be collected from Balance Sheet or Profit and Loss Account; as such the working capital may be classified as follows:

(i) Cash Working Capital – This is calculated from the information contained in profit and

loss account. This concept of working capital has assumed a great significance in recent years as it shows the adequacy of cash flow in business. It is based on ‘Operating Cycle Concept’.

(ii) Balance Sheet Working Capital – The data for Balance Sheet Working Capital is collected from the balance sheet. On this basis the Working Capital can also be divided in three more types, viz., gross Working Capital, net Working Capital and Working Capital deficit.

## NEED FOR AND COMPONENTS OF WORKING CAPITAL

For smooth running an enterprise, adequate amount of working capital is very essential.

Efficiency in this area can help, to utilize fixed assets gainfully, to assure the firm’s long-term success and to achieve the overall goal of maximization of the shareholders, fund. Shortage or bad management of cash may result in loss of cash discount and loss of reputation due to non-payment of obligation on due dates. Insufficient inventories may be the main cause of production held up and it may compel the enterprises to purchase raw materials at unfavorable rates.

Like-wise facility of credit sale is also very essential for sales promotions. It is rightly observed that “many a times business failure takes place due to lack of working capital.”



Adequate working capital provides a cushion for bad days, as a concern can pass its period of depression without much difficulty.

O' Donnell correctly explained the significance of adequate working capital and mentioned that "to avoid interruption in the production schedule and maintain sales, a concern requires funds to finance inventories and receivables."

The adequacy of cash and current assets together with their efficient handling virtually determines the survival or demise of a concern. An enterprise should maintain adequate working capital for its smooth functioning. Both, excessive working capital and inadequate working capital will impair the profitability and general health of a concern.

Therefore working capital is needed till a firm gets cash on sale of finished products. It depends on two factors:

- i. Manufacturing cycle i.e. time required for converting the raw material into finished product; and
- ii. Credit policy i.e. credit period given to Customers and credit period allowed by creditors.

Thus, the sum total of these times is called an "Operating cycle" and it consists of the following six

steps:

- i. Conversion of cash into raw materials.
- ii. Conversion of raw materials into work-in-process.
- iii. Conversion of work-in-process into finished products.
- iv. Time for sale of finished goods—cash sales and credit sales.
- v. Time for realization from debtors and Bills receivables into cash.
- vi. Credit period allowed by creditors for credit purchase of raw materials, inventory and creditors for wages and overheads.

#### DETERMINANTS OF WORKING CAPITAL :

The factors influencing the working capital decisions of a firm may be classified as two groups, such as internal factors and external factors. The internal factors includes, nature of business size of business, firm's product policy, credit policy, dividend policy, and access to money and capital markets, growth and expansion of business etc. The external factors include business fluctuations, changes in the technology, infrastructural facilities, import policy and the taxation policy etc. These factors are discussed in brief in the following lines.





## I. Internal Factors

### 1. Nature and size of the business

The working capital requirements of a firm are basically influenced by the nature and size of the business. Size may be measured in terms of the scale of operations. A firm with larger scale of operations will need more working capital than a small firm. Similarly, the nature of the business - influence the working capital decisions. Trading and financial firms have less investment in fixed assets. But require a large sum of money to be invested in working capital. Retail stores, business units require larger amount of working capital, where as, public utilities need less working capital and more funds to invest in fixed assets.

### 2. Firm's production policy

The firm's production policy (manufacturing cycle) is an important factor to decide the working capital requirement of a firm. The production cycle starts with the purchase and use of raw material and completes with the production of finished goods. On the other hand production policy is uniform production policy or seasonal production policy etc., also influences the working capital decisions. Larger the manufacturing cycle and uniform production policy – larger will be the requirement of working capital. The working capital requirement will be higher with varying production schedules in accordance with the changing demand.

### 3. Firm's credit policy

The credit policy of a firm influences credit policy of working capital. A firm following liberal credit policy to all customers requires funds. On the other hand, the firm adopting strict credit policy and grant credit facilities to few potential customers will require less amount of working capital.

### 4. Availability of credit

The working capital requirements of a firm are also affected by credit terms granted by its suppliers – i.e. creditors. A firm will need less working capital if liberal credit terms are available to it. Similarly, the availability of credit from banks also influences the working capital needs of the firm. A firm, which can get bank credit easily on favorable conditions, will be operated with less working capital than a firm without such a facility.

### 5. Growth and expansion of business

Working capital requirement of a business firm tend to increase in correspondence with growth in sales volume and fixed assets. A growing firm may need funds to invest in fixed assets in order to sustain its growing production and sales. This will, in turn, increase



investment in current assets to support increased scale of operations. Thus, a growing firm needs additional funds continuously.

#### 6. Profit margin and dividend policy

The magnitude of working capital in a firm is dependent upon its profit margin and dividend policy. A high net profit margin contributes towards the working capital pool. To the extent the net profit has been earned in cash, it becomes a source of working capital. This depends upon the dividend policy of the firm. Distribution of high proportion of profits in the form of cash dividends results in a drain on cash resources and thus reduces company's working capital to that extent. The working capital position of the firm is strengthened if the management follows conservative dividend policy and vice versa.

#### 7. Operating efficiency of the firm

Operating efficiency means the optimum utilisation of a firm's resources at minimum cost. If a firm successfully controls operating cost, it will be able to improve net profit margin which, will, in turn, release greater funds for working capital purposes.

#### 8. Co-ordinating activities in firm

The working capital requirements of a firm are depend upon the co-ordination between production and distribution activities. The greater and effective the co-ordinations, the pressure on the working capital will be minimized. In the absence of co-ordination, demand for working capital is reduced.



## II. External Factors

### 1. Business fluctuations

Most firms experience fluctuations in demand for their products and services. These business variations affect the working capital requirements. When there is an upward swing in the economy, sales will increase, correspondingly, the firm's investment in inventories and book debts will also increase. Under boom, additional investment in fixed assets may be made by some firms to increase their productive capacity. This act of the firm will require additional funds. On the other hand when, there is a decline in economy, sales will come down and consequently the conditions, the firm try to reduce their short-term borrowings. Similarly the seasonal fluctuations may also affect the requirement of working capital of a firm.

### 2. Changes in the technology

The technological changes and developments in the area of production can have immediate effects on the need for working capital. If the firm wish to install a new machine in the place of old system, the new system can utilise less expensive raw materials, the inventory needs may be reduced there by working capital needs.

### 3. Import policy

Import policy of the Government may also effect the levels of working capital of a firm since they have to arrange funds for importing goods at specified times.

### 4. Infrastructural facilities

The firms may require additional funds to maintain the levels of inventory and other current assets, when there is a good infrastructural facility in the company like transportation and communications.

### 5. Taxation policy

The tax policies of the Government will influence the working capital decisions. If the Government follows regressive taxation policy, i.e. imposing heavy tax burdens on business firms, they are left with very little profits for distribution and retention purpose. Consequently the firm has to borrow additional funds to meet their increased working capital needs. When there is a liberalized tax policy, the pressure on working capital requirement is minimized.

Thus the working capital requirements of a firm are influenced by the internal and external factors.

## MEASUREMENT OF WORKING CAPITAL:



There are 3 methods for assessing the working capital requirement as explained below:

a) Percent of Sales Method

Based on the past experience, some percentage of sale may be taken for determining the quantum of working capital

b) Regression Analysis Method

The relationship between sales and working capital and its various components may be plotted on Scatter diagram and the average percentage of past 5 years may be ascertained. This average percentage of sales may be taken as working capital. Similar exercise may be carried out at the beginning of the year for assessing the working capital requirement. This method is suitable for simple as well as complex situations.

c) Operating Cycle Method

As a first step, we have to compute the operating cycle as follows:

i) Inventory period: Number of days consumption in stock =  $I \div M/36$

Where I– Average inventory during the year

M = Materials consumed during the year

ii) Work-in-process: Number of days of work-in-process =  $W \div K/365$

Where W = Average work-in-process during the year

K = Cost of work-in-process i.e., Material + Labour + Factory overheads.

iii) Finished products inventory period =  $G \div F/365$

Where G = Average finished products inventory during the year F= Cost of finished goods sold during the year

iv) Average collection period of Debtors =  $D \div S/365$

Where D = Average Debtors balances during the year S = Credit sales during the year



v) Credit period allowed by Suppliers =  $C \div P/365$

Where C = Average creditors' balances during the year

P = credit purchases during the year vi) Minimum cash balance to be kept daily.

Formula: O.C. = M + W + F + D – C

Note : It is also known as working capital cycle. Operating cycle is the total time gap between the purchase of raw material and the receipt from Debtors.

The calculation of net working capital may also be shown as follows ; Working Capital = Current Assets – Current Liabilities

= (Raw Materials Stock + Work-in-progress Stock + Finished Goods Stock + Debtors + Cash Balance) – (Creditors + Outstanding Wages + Outstanding Overheads).

Where,

Raw Materials = Cost (Average) of Materials in Stock

Work-in-progress Stock = Cost of Materials + Wages + Overhead of Work-in-progress.

Finished Goods Stock = Cost of Materials + Wages + Overhead of Finished Goods. Creditors for Material = Cost of Average Outstanding Creditors.

Creditors for Wages = Averages Wages Outstanding. Creditors for Overhead = Average Overheads Outstanding. Thus,

Working Capital = Cost of Materials in Stores, in Work-in-progress, in Finished Goods and in Debtors.

Less : Creditors for Materials

Plus : Wages in Work-in-progress, in Finished Goods and in Debtors.

Less : Creditors for Wages





Plus : Overheads in Work-in-progress, in Finished Goods and in Debtors.

Less : Creditors for Overheads.

The work sheet for estimation of working capital requirements under the operating cycle method may be presented as follows:

### ESTIMATION OF WORKING CAPITAL REQUIREMENTS

I Current Assets:	Amount	Amount	Amount
Minimum Cash Balance		****	
Inventories :			
Raw Materials	****		
Work-in-progress	****		
Finished Goods	****	****	
Receivables :			
Debtors	****		
Bills	****	****	
Gross Working Capital (CA)		****	****
II Current Liabilities :			
Creditors for Purchases		****	
Creditors for Wages		****	
Creditors for Overheads		****	****
Total Current Liabilities (CL)		****	****
Excess of CA over CL			****
+ Safety Margin			****
Net Working Capital			****

The following points are also worth noting while estimating the working capital requirement:

1. Depreciation: An important point worth noting while estimating the working capital requirement is the depreciation on fixed assets. The depreciation on the fixed assets, which



are used in the production process or other activities, is not considered in working capital estimation. The depreciation is a non-cash expense and there is no funds locked up in depreciation as such and therefore, it is ignored. Depreciation is neither included in valuation of work-in-progress nor in finished goods. The working capital calculated by ignoring depreciation is known as cash basis working capital. In case, depreciation is included in working capital calculations, such estimate is known as total basis working capital.

2. Safety Margin: Sometimes, a firm may also like to have a safety margin of working capital in order to meet any contingency. The safety margin may be expressed as a % of total current assets or total current liabilities or net working capital. The safety margin, if required, is incorporated in the working capital estimates to find out the net working capital required for the firm. There is no hard and fast rule about the quantum of safety margin and depends upon the nature and characteristics of the firm as well as of its current assets and current liabilities

**Example.1**

Hi-tech Ltd. plans to sell 30,000 units next year. The expected cost of goods sold is as follows:

	Rs. (Per Unit)
Raw material	100
Manufacturing expenses	30
Selling, administration and financial expenses	20
Selling price	200

The duration at various stages of the operating cycle is expected to be as follows :

Raw material stage	2 months
Work-in-progress stage	1 month
Finished stage	1/2 month
Debtors stage	1 month

Assuming the monthly sales level of 2,500 units, estimate the gross working capital requirement. Desired cash balance is 5% of the gross working capital requirement, and working-progress is 25% complete with respect to manufacturing expenses.

**Solution:**

**Statement of Working Capital Requirement**

1. Current Assets:	Amt. (Rs.)	Amt. (Rs.)
Stock of Raw Material ( $2,500 \times 2 \times 100$ )		5,00,000



Work-in-progress:

Raw Materials (2,500×100)	2,50,000	
Manufacturing Expenses 25% of (2,500×30)	18,750	2,68,750

Finished Goods:

Raw Materials (2,500×½×100)	1,25,000	
Manufacturing Expenses (2,500×½×30)	37,500	1,62,500
Debtors (2,500×150)	<u>3,75,000</u>	
	13,06,250	

Cash	Balance
(13,06,250×5/95)	<u>68,750</u>

Working Capital Requirement 13,75,000

Note: Selling, administration financial expenses have not been included in valuation of and closing stock.

## Example.2

Calculate the amount of working capital requirement for SRCC Lt d. from the following information:

	(Per Unit)	₹
Raw materials	160	
Direct labour	60	
Overheads	<u>120</u>	
Total cost	340	
Profit		<u>60</u>
Selling price	<u>400</u>	

Raw materials are held in stock on an average for one month. Materials are in process on an average for half-a-month. Finished goods are in stock on an average for one month. Credit allowed by suppliers is one month and credit allowed to debtors is two months. Time lag in payment of wages is 1½ weeks. Time lag in payment of overhead expenses is one month. One fourth of the sales are made on cash basis.

Cash in hand and at the bank is expected to be Rs. 50,000; and expected level of production



Cash in hand and at the bank is expected to be Rs. 50,000; and expected level of production amounts to 1,04,000 units for a year of 52 weeks.

You may assume that production is carried on evenly throughout the year and a time period of four weeks is equivalent to a month.

Solution :

Statement of Working Capital Requirement

1. Current Assets :	Amt. (Rs.)	Amt. (Rs.)
Cash Balance		50,000
Stock of Raw Materials (2,000×160×4)		12,80,000
Work-in-progress :		
Raw Materials (2,000×160×2)	6,40,000	
Labour and Overheads (2,000×180×2)×50%	<u>3,60,000</u>	10,00,000
Finished Goods (2,000×340×4)		27,20,000
Debtors (2,000×75%×340×8)		<u>40,80,000</u>
Total Current Assets		<u>91,30,000</u>
2. Current Liabilities :		
Creditors (2,000×Rs. 160×4)		12,80,000
Creditors for Wages (2,000×Rs. 60×1½)		1,80,000
Creditors for Overheads (2,000×Rs. 120×4)		<u>9,60,000</u>
Total Current Liabilities		<u>24,20,000</u>
Net Working Capital (CA–CL)		<u>67,10,000</u>

Example.3

JBC Ltd. sells goods on a gross profit of 25%. Depreciation is considered as a part of cost of production. The following are the annual figures given to you :

Sales (2 months credit)	Rs. 18,00,000
	4,50,00
Materials consumed (1 months credit)	0
	3,60,00
Wages paid (1 month lag in payment)	0
Cash manufacturing expenses (1 month lag in)	4,80,000



payment)

Administrative expenses (1 month lag in payment) 1,20,000

Sales promotion expenses (paid quarterly in advance) 60,000

The company keeps one month's stock each of raw materials and finished goods. It also keeps Rs.

1,00,000 in cash. You are required to estimate the working capital requirements of the company on cash cost basis, assuming 15% safety margin .

Solution:

### Statement of Working Capital Requirement

	Amt. (Rs.)
1. Current Assets :	
Cash-in-hand	1,00,000
Debtors (cost of sales i.e. $14,70,000 \times 2/12$ )	2,45,000
Prepaid Sales Promotion expenses	15,000
Inventories :	
Raw Materials ( $4,50,000/12$ )	37,500
Finished goods ( $12,90,000/12$ )	<u>1,07,500</u>
Total current assets	<u>5,05,000</u>
2. Current Liabilities :	
Sundry creditors ( $4,50,000/12$ )	37,500
Outstanding Manufacturing exp. ( $4,80,000/12$ )	40,000
Outstanding Administrative exp. ( $1,20,000/12$ )	10,000
Outstanding Wages ( $3,60,000/12$ )	<u>30,000</u>
Total current liabilities	<u>1,17,500</u>
Excess of CA and CL	3,87,500
+ 15% for contingencies	<u>58,125</u>
Working capital required	<u>4,45,625</u>

Working Notes :





1. Cost Structure		Rs.
		18,00,00
Sales		0
		<u>4,50,00</u>
– Gross profit 25% on sales		<u>0</u>
		13,50,00
Cost of production		0
– Cost of materials	Rs. 4,50,000	
– Wages	3,60,000	<u>8,10,000</u>
Manufacturing expenses (Total)		5,40,000
		<u>4,80,00</u>
– Cash Manufacturing expenses		<u>0</u>
Therefore, Depreciation		<u>60,000</u>
2. Total cash cost :		
Cost of production		13,50,000
– Depreciation		60,000
+ Administrative expenses		1,20,000
+ Sales promotion expenses		<u>60,000</u>
Total Cash Cost		<u>14,70,000</u>

## IMPORTANCE OR ADVANTAGES OF ADEQUATE WORKING CAPITAL

Working capital is the life blood and nerve centre of a business. Just as circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of a business. No business can run successfully without an adequate amount of working capital. The main advantages of maintaining adequate amount of working capital are as follows:

1. Solvency of the business: Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
2. Goodwill: Sufficient working capital enables a business concern to make prompt payments and hence helps in creating and maintaining goodwill.
3. Easy loans: A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and other on easy and favourable terms.
4. Cash discounts: Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
5. Regular supply of raw materials: Sufficient working capital ensures regular supply of raw materials and continuous production.



6. Regular payment of salaries, wages and other day-to-day commitments: A company which has ample working capital can make regular payment of salaries, wages and other day-to-day commitments which raises the morale of its employees, increases their efficiency, reduces wastages and costs and enhances production and profits.
7. Exploitation of favourable market conditions: Only concerns with adequate working capital can exploit favourable market conditions such as purchasing its requirements in bulk when the prices are lower and by holding its inventories for higher prices.
8. Ability to face crisis: Adequate working capital enables a concern to face business crisis in emergencies such as depression because during such periods, generally, there is much pressure on working capital.
9. Quick and regular return on investments: Every Investor wants a quick and regular return on his investments. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors as there may not be much pressure to plough back profits. This gains the confidence of its investors and creates a favourable market to raise additional funds i.e., the future.
10. High morale: Adequacy of working capital creates an environment of security, confidence, and high morale and creates overall efficiency in a business.

#### DISADVANTAGES OF REDUNDANT OR EXCESSIVE WORKING CAPITAL

1. Excessive Working Capital means idle funds which earn no profits for the business and hence the business cannot earn a proper rate of return on its investments.
2. When there is a redundant working capital, it may lead to unnecessary purchasing and accumulation of inventories causing more chances of theft, waste and losses.
3. Excessive working capital implies excessive debtors and defective credit policy which may cause higher incidence of bad debts.
4. It may result into overall inefficiency in the organization.
5. When there is excessive working capital, relations with banks and other financial institutions may not be maintained.
6. Due to low rate of return on investments, the value of shares may also fall.
7. The redundant working capital gives rise to speculative transactions.

#### DISADVANTAGES OR DANGERS OF INADEQUATE WORKING CAPITAL

1. A concern which has inadequate working capital cannot pay its short-term liabilities in time. Thus, it will lose its reputation and shall not be able to get good credit facilities.
2. It cannot buy its requirements in bulk and cannot avail of discounts, etc.
3. It becomes difficult for the firm to exploit favourable market conditions and undertake profitable projects due to lack of working capital.
4. The firm cannot pay day-to-day expenses of its operations and it creates



inefficiencies, increases costs and reduces the profits of the business.

5. It becomes impossible to utilize efficiently the fixed assets due to non-availability of liquid funds.

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## UNIT II

### CASH MANAGEMENT

Cash management is one of the key areas of working capital management. Cash is the most liquid current assets. Cash is the common denominator to which all current assets can be reduced because the other major liquid assets, i.e. receivable and inventory get eventually converted into cash. This underlines the importance of cash management.

The term “Cash” with reference to management of cash is used in two ways. In a narrow sense cash refers to coins, currency, cheques, drafts and deposits in banks. The broader view of cash includes near cash assets such as marketable securities and time deposits in banks. The reason why these near cash assets are included in cash is that they can readily be converted into cash. Usually, excess cash is invested in marketable securities as it contributes to profitability.

Cash is one of the most important components of current assets. Every firm should have adequate cash, neither more nor less. Inadequate cash will lead to production interruptions, while excessive cash remains idle and will impair profitability. Hence, the need for cash management. The cash management assumes significance for the following reasons.

### SIGNIFICANCE

1. Cash planning - Cash is the most important as well as the least unproductive of all current assets.

Though, it is necessary to meet the firm's obligations, yet idle cash earns nothing. Therefore, it is essential to have a sound cash planning neither excess nor inadequate.

2. Management of cash flows - This is another important aspect of cash management. Synchronization between cash inflows and cash outflows rarely happens. Sometimes, the cash inflows will be more than outflows because of receipts from debtors, and cash sales in huge amounts. At other times, cash outflows exceed inflows due to payment of taxes, interest and dividends etc. Hence, the cash flows should be managed for better cash management.

3. Maintaining optimum cash balance - Every firm should maintain optimum cash balance. The management should also consider the factors determining and influencing the cash balances at various point of time. The cost of excess cash and danger of inadequate cash should be matched to determine the optimum level of cash balances.

4. Investment of excess cash - The firm has to invest the excess or idle funds in short term



securities or investments to earn profits as idle funds earn nothing. This is one of the important aspects of management of cash.

Thus, the aim of cash management is to maintain adequate cash balances at one hand and to use excess cash in some profitable way on the other hand.

## MOTIVES

Motives or desires for holding cash refer to various purposes. The purpose may be different from person to person and situation to situation. There are four important motives to hold cash.

a. Transactions motive - This motive refers to the holding of cash, to meet routine cash requirements in the ordinary course of business. A firm enters into a number of transactions which requires cash payment. For example, purchase of materials, payment of wages, salaries, taxes, interest etc. Similarly, a firm receives cash from cash sales, collections from debtors, return on investments etc. But the cash inflows and cash outflows do not perfectly synchronise. Sometimes, cash receipts are more than payments while at other times payments exceed receipts. The firm must have to maintain sufficient (funds) cash balance if the payments are more than receipts. Thus, the transactions motive refers to the holding of cash to meet expected obligations whose timing is not perfectly matched with cash receipts. Though, a large portion of cash held for transactions motive is in the form of cash, a part of it may be invested in marketable securities whose maturity conform to the timing of expected payments such as dividends, taxes etc.

b. Precautionary motive - Apart from the non-synchronisation of expected cash receipts and payments in the ordinary course of business, a firm may be failed to pay cash for unexpected contingencies. For example, strikes, sudden increase in cost of raw materials etc. Cash held to meet these unforeseen situations is known as precautionary cash balance and it provides a caution against them. The amount of cash balance under precautionary motive is influenced by two factors i.e. predictability of cash flows and the availability of short term credit. The more unpredictable the cash flows, the greater the need for such cash balances and vice versa. If the firm can borrow at short-notice, it will need a relatively small balance to meet contingencies and vice versa. Usually precautionary cash balances are invested in marketable securities so that they contribute something to profitability.

c. Speculative motive - Sometimes firms would like to hold cash in order to exploit, the profitable opportunities as and when they arise. This motive is called as speculative motive. For example, if the firm expects that the material prices will fall, it can delay the purchases and make purchases in future when price actually declines. Similarly, with the hope of buying





securities when the interest rate is expected to decline, the firm will hold cash. By and large, firms rarely hold cash for speculative purposes.

d. Compensation motive - This motive to hold cash balances is to compensate banks and other financial institutes for providing certain services and loans. Banks provide a variety of services to business firms like clearance of cheques, drafts, transfer of funds etc. Banks charge a commission or fee for their services to the customers as indirect compensation. Customers are required to maintain a minimum cash balance at the bank. This balance cannot be used for transaction purposes. Banks can utilize the balances to earn a return to compensate their cost of services to the customers. Such balances are compensating balances. These balances are also required by some loan agreements between a bank and its customers. Banks require a customer to maintain a minimum cash balance in his account to compensate the bank when the supply of credit is restricted and interest rates are rising.

### Objectives

The basic objectives of cash management are

- (i) to make the payments when they become due and
- (ii) to minimize the cash balances. The task before the cash management is to reconcile the two conflicting nature of objectives.

1. Meeting the payments schedule - The basic objective of cash management is to meet the payment schedule. In the normal course of business, firms have to make payments of cash to suppliers of raw materials, employees and so on regularly. At the same time firm will be receiving cash on a regular basis from cash sales and debtors. Thus, every firm should have adequate cash to meet the payments schedule. In other words, the firm should be able to meet the obligations when they become due.

The firm can enjoy certain advantages associated with maintaining adequate cash. They are:

- a. Insolvency - The question of insolvency does not arise as the firm will be able to meet its obligations.
- b. Good relations - Adequate cash balance in the business firm helps in developing good relations with creditors and suppliers of raw materials.
- c. Credit worthiness - The maintenance of adequate cash balances increase the credit worthiness of the firm. Consequently it will be able to purchase raw materials and procure credit with favorable terms and conditions.
- d. Availing discount facilities - The firm can avail the discounts offered by the creditors for payments before the due date.
- e. To meet unexpected facilities - The firm can easily meet the unexpected cash



expenditure in situations like strikes, competition from customers etc. with little strain. So, every firm should have adequate cash balances for effective cash management.

2. Minimising funds committed to cash balances - The second important objective of cash management is to minimise cash balance. In minimizing the cash balances two conflicting aspects have to be reconciled. A high level of cash balances will ensure prompt payment together with all advantages, but at the same time, cash is a non-earning asset and the larger balances of cash impair profitability. On the other hand, a low level of cash balance may lead to the inability of the firm to meet the payment schedule. Thus the objective of cash management would be to have an optimum cash balance.

Factors determining cash needs - Maintenance of optimum level of cash is the main problem of cash management. The level of cash holding differs from industry to industry, organisation to organisation. The factors determining the cash needs of the industry is explained as follows:

- i. Matching of cash flows - The first and very important factor determining the level of cash requirement is matching cash inflows with cash outflows. If the receipts and payments are perfectly coincide or balance each other, there would be no need for cash balances. The need for cash management therefore, due to the non-synchronisation of cash receipts and disbursements. For this purpose, the cash inflows and outflows have to be forecast over a period of time say 12 months with the help of cash budget. The cash budget will pin point the months when the firm will have an excess or shortage of cash.
- ii. Short costs - Short costs are defined as the expenses incurred as a result of shortfall of cash such as unexpected or expected shortage of cash balances to meet the requirements. The short costs includes, transaction costs associated with raising cash to overcome the shortage, borrowing costs associated with borrowing to cover the shortage i.e. interest on loan, loss of trade-discount, penalty rates by banks to meet a shortfall in compensating, cash balances and costs associated with deterioration of the firm's credit rating etc. which is reflected in higher bank charges on loans, decline in sales and profits.
- iii. Cost of cash on excess balances - One of the important factors determining the cash needs is the cost of maintaining cash balances i.e. excess or idle cash balances. The cost of maintaining excess cash balance is called excess cash balance cost. If large funds are idle, the implication is that the firm has missed opportunities to invest and



thereby lost interest. This is known as excess cost. Hence the cash management is necessary to maintain an optimum balance of cash.

- iv. Uncertainty in business - Uncertainty plays a key role in cash management, because cash flows cannot be predicted with complete accuracy. The first requirement of cash management is a precautionary cushion to cope with irregularities in cash flows, unexpected delays in collections and disbursements, defaults and expected cash needs the uncertainty can be overcome through accurate forecasting of tax payments, dividends, capital expenditure etc. and ability of the firm to borrow funds through overdraft facility.
- iv. Cost of procurement and management of cash - The costs associated with establishing and operating cash management staff and activities determining the cash needs of a business firm. These costs are generally fixed and are accounted for by salary, storage and handling of securities etc. The above factors are considered to determine the cash needs of a business firm.

## THE STRATEGIES FOR CASH MANAGEMENT

I) Projection of cash flows and planning - The cash planning and the projection of cash flows is determined with the help of cash budget. The cash budget is the most important tool in cash management. It is a device to help a firm to plan and control the use of cash. It is a statement showing the estimated cash inflows and cash outflows over the firm's planning horizon. In other words the net cash position i.e., surplus or deficiency of a firm is highlighted by the cash budget from one budgeting period to another period.

II) Determining optimal level of cash holding in the company - One of the important responsibilities of a finance manager is to maintain sufficient cash balances to meet the current obligations of a company. Determining the optimum level of cash balance is influenced by a tradeoff between risk and profitability. Every business enterprise holds cash balances for transaction purposes and to meet precautionary, speculative and compensative motives. With the help of cash budget the finance manager predicts the inflows and outflows of cash during a particular period of time and thereby determines the cash requirements of the company. While determining the optimum level of cash balance (neither excess nor inadequate cash balances) the finance manager has to bring a trade off between the liquidity and profitability of the firm. The optimum level of cash balances of a company



can be determined in various ways : They are

- a) Inventory model (Economic Order Quantity) to cash management
- b) Stochastic model
- c) Probability model d) The BAT Model

A) Inventory model (EOQ) to cash management - Economic Order Quantity (EOQ) model is used in determination of optimal level of cash of a company. According to this model optimal level of cash balance is one at which cost of carrying the inventory of cash and cost of going to the market for satisfying cash requirements is minimum. The carrying cost of holding cash refers to the interest foregone on marketable securities whereas cost of going to the market means cost of liquidating marketable securities in cash.

Optimum level of cash balance can be determined as follows:

$$Q = \sqrt{\frac{2AO}{C}}$$

Where Q = Optimum level of cash inventory

A = Total amount of transaction demand

O = Average fixed cost of securing cash from the market (ordering cost of cash / securities)

C = Cost of carrying cash inventory,

i.e., interest rate on marketable securities for the period involved. Assumptions: The model is based on the following assumptions:

- 1) The demand for cash, transactions costs of obtaining cash and the holding costs for a particular period are given and do not change during that period.
- 2) There is a constant demand for cash during the period under consideration.
- 3) Cash payments are predictable
- 4) Banks do not impose any restrictions on firms with respect of maintenance of minimum cash balances in the bank accounts.



For example :Teja& Company estimated cash payments of Rs. 36,000 for a period of 30 days.The average fixed cost for securing capital from the market (ordering cost) is Rs. 100 and the carrying cost or interest rate on marketable securities is 12% per annum. Determine the optimum quantity of cash balance?

A = Monthly requirement = Rs. 36,000

O = Fixed Cost for securing capital = Rs. 100

C = Cost of interest on marketable securities = 12% per year

Per month: 1% or (0.1)

Therefore:

$$Q = \sqrt{\frac{2AO}{C}} = \sqrt{\frac{2 \times 36000 \times 100}{0.1}}$$

Optimum transaction of cash: Rs. 8,485.28

Limitations - The EOQ model to determine the optimum size of cash balances is suffered with several practical problems. The first and important problem (limitation) is related with determination of fixed cost associated with replenishing cash. The fixed cost includes both explicit cost (interest rate at which required capital can be secured from the market and implicit cost (time spent in placing an order for getting financial assistance etc.) The computation of implicit cost is very difficult. The model is not useful and applicable where the cash flows are irregular in nature.

B) Stochastic (irregular) Model - This model is developed to avoid the problems associated with the EOQ model. This model was developed by Miller and Orr. The basic assumption of this model is that cash balances are irregular, i.e., changes randomly over a period of time both in size and direction and form a normal distribution as the number of periods observed increases. The model prescribes two control limits Upper control Limit (UCL) and Lower Control Limit (LCL). When the cash balances reaches the upper limit a transfer of cash to investment account should be made and when cash balances reach the lower point a portion of securities constituting investment account of the company should be liquidated to return the cash balances to its return point. The control limits are converting securities into cash and the vice – versa, and the cost carrying stock of cash.





The Miller and Orr model is the simplest model to determine the optimal behavior in irregular cash flows situation. The model is a control limit model designed to determine the time and size of transfers between an investment account and cash account. There are two control limits.

Upper Limit (U) and lower limit (L). According to this model when cash balance of the company reach the upper limit, cash equal to “U – O” should be invested in marketable securities so that new cash balance touches “O” point. If the cash balance touch the “L’ point, finance manager should

immediately liquidate that much portion of the investment portfolio which could return the cash balance to ‘O’ point. (O is optimal point of cash balance or target cash balance)

The “O” optimal point of cash balance is determined by using the formula

$$O = \frac{3}{4} \sqrt{\frac{3TV}{4I}}$$

Where,

O = target cash balance (Optimal cash balance)

T= Fixed cost associated with security transactions

I = Interest per day on marketable securities

V = Variance of daily net cash flows.

Limitations: This model is subjected to some practical problems

- 1) The first and important problem is in respect of collection of accurate data about transfer costs, holding costs, number of transfers and expected average cash balance.
- 2) The cost of time devoted by financial managers in dealing with the transfers of cash to securities and vice versa.
- 3) The model does not take in account the short term borrowings as an alternative to selling of marketable securities when cash balance reaches lower limit.



Besides the practical difficulties in the application of the model, the model helps in providing more, better and quicker information for management of cash. It was observed that the model produced considerable cost savings in the real life situations.

C) Probability Model - This model was developed by William Beranek. Beranek observed that cash flows of a firm are neither completely predictable nor irregular (stochastic). The cash flows are predictable within a range. This occurrence calls for formulating the demand for cash as a probability distribution of possible outcomes.

According to this model, a finance manager has to estimate probabilistic outcomes for net cash flows on the basis of his prior knowledge and experience. He has to determine what is the operating cash balance for a given period, what is the expected net cash flow at the end of the period and what is the probability of occurrence of this expected closing net cash flows.

The optimum cash balance at the beginning of the planning period is determined with the help of the probability distribution of net cash flows. Cost of cash shortages, opportunity cost of holding cash balances and the transaction cost.

Assumptions :

- 1) Cash is invested in marketable securities at the end of the planning period say a week or a month.
- 2) Cash inflows take place continuously throughout the planning period.
- 3) Cash inflows are of different sizes.
- 4) Cash inflows are not fully controllable by the management of firm.
- 5) Sale of marketable securities and other short term investments will be effected at the end of the planning period.

The probability model prescribed the decision rule for the finance manager that the finance manager should go on investing in marketable securities from the opening cash balance until the expectation, that the ending cash balance will be below the optimum cash balance, where the ratio of the incremental net return per rupee of investment is equal to the incremental shortage cost per rupee.

D) The BAT Model

The Baumol-Allais-Tobin (BAT) model is a classic means of analyzing the cash management problem. It is a straightforward model and very useful for illustrating the factors in cash management and, more generally, current asset management.



To develop the BAT model, suppose the Golden Socks Corporation starts at Time 0 with a cash balance of C \$1.2 million. Each week, outflows exceed inflows by \$600,000. As a result, the cash balance drops to zero at the end of Week 2. The average cash balance is the beginning balance (\$1.2 million) plus the ending balance (\$0) divided by 2, or  $(\$1.2 \text{ million} + \$0)/2 = \$600,000$  over the two-week period. At the end of Week 2, Golden Socks replaces its cash by depositing another \$1.2 million.

As we have described, the cash management strategy for Golden Socks is very simple and boils down to depositing \$1.2 million every two weeks.

Implicitly, we assume the net cash outflow is the same every day and it is known with certainty. These two assumptions make the model easy to handle. We indicate what happens when they do not hold in the next section.

If C were set higher, say, at \$2.4 million, cash would last four weeks before the firm would have to sell marketable securities, but the firm's average cash balance would increase to \$1.2

million (from \$600,000). If C were set at \$600,000, cash would run out in one week and the firm would have to replenish cash more frequently, but its average cash balance would fall from \$600,000 to \$300,000.

Because transaction costs must be incurred whenever cash is replenished (for example, the brokerage costs of selling marketable securities), establishing large initial balances lowers the trading costs connected with cash management. However, the larger the average cash balance, the greater is the opportunity cost (the return that could have been earned on marketable securities).

III. Strategy for economizing cash - Once cash flow projections are made and appropriate cash balances are established, the finance manager should take steps towards effective utilization of available cash resources. A number of strategies have to be developed for this purpose they are: a) Strategy towards accelerating cash inflows, and b) Strategy towards decelerating cash outflows

a) Strategy towards accelerating cash inflows - In order to accelerate the cash inflows and maximize the available cash the firm has to employ several methods such as reduce the time lag

between the movement of a payment to the company is mailed and the movement of the funds are ready for redeployment by the company. This includes the quick deposit of customer's



cheques,

establishing collection centers and lock – box system etc.

i) Quick deposit of customer's cheques- The inflow is accelerated through quick deposit of cheques in the banks, the moment they are received. Special attention should be given to deposit the cheques without any delay.

ii) Establishing collection centres - In order to accelerate the cash inflows the organization may establish collection centres in various marketing centres of the country. These centres may collect the cheques or payments from the customers and deposit them in the local bank. Thus, these cheques are collected immediately at the collection centre and the bank can transfer the surplus money, if any, to the company's main bank. Thus, the decentralized collection system of the company reduced the time lag in cash remittances and collections.

iii) Lock-box method - The new device which is popular in recent past is lock-box method which will help to reduce the time interval from the mailing of the cheque to the use of funds by the company. Under this arrangement, the company rents lock-box from post offices through its service area. The customer's are instructed to mail cheques to the lock-box. The company's bank collects the mail from the lock-box several times a day and deposit them directly in the company's account on the same day. This will reduce the time in mailing cheques, deposit them in bank and thereby reduce overhead costs to the company. But one of the serious limitations of the system is that the banks will charge additional service costs to the company. However, this system is proved useful and economic to the firm.

b) Strategy for slowing cash outflows - In order to accelerate cash availability in the company, finance manager must employ some devices that could slow down the speed of payments outward in addition to accelerating collections. The methods of slowing down disbursements are as follows:

iv) Delaying outward payment - The finance manager can increase the cash turnover by delaying the payment on bills until the due date of the no-cost period. Thus, he can economize cash resources of the firm.

v) Making pay roll periods less frequent - The firm can economise its cash resources by changing the frequency of disbursing pay to its employees. For example, if the company is presently paying wages weekly, it can effect substantial cash savings if the pay is disbursed only once in a month.



vi) Solving disbursement by use of drafts - A company can delay disbursement by use of drafts on funds located elsewhere. When the firm pays the amount through drafts, the bank will not make the payment against the draft unless the bank gets the acceptance of the issuer firm. Thus the firm need not have balance in its bank account till the draft is presented for acceptance. On the other hand, it will take several days for the draft to be actually paid by the company. Thus finance manager can economize large amounts of cash resources for at least a fortnight. The funds saved could be invested in highly liquid low risk assets to earn income there on.

vii) Playing the float - Float is the difference between the company's cheque book balance and the balance shown in the bank's books of accounts. When the company writes a cheque, it will reduce the balance in its books of accounts by the amount of cheque. But the bank will debit the amount of its customers only when the cheque is collected. On the other hand, the company can maximize its cash utilization by ignoring its book balance and keep its cash invested until just before the cheques are actually presented for payment. This technique is known as "playing the float".

viii) Centralized payment system - A firm can delay payments through centralized payment system. Under this system, payments will be made from a single central account. This will benefit the company.

ix) By transferring funds from one bank to another bank firm can maximize its cash turnover.





## UNIT III

### ACCOUNTS RECEIVABLES MANAGEMENT AND FACTORING

Receivables mean the book debts or debtors and these arise, if the goods are sold on credit. Debtors form about 30% of current assets in India. Debt involves an element of risk and bad debts also. Hence, it calls for careful analysis and proper management. The goal of receivables management is to maximize the value of the firm by achieving a tradeoff between risk and profitability. For this purpose, a finance manager has:

- a. to obtain optimum (non-maximum) value of sales;
- b. to control the cost of receivables, cost of collection, administrative expenses, bad debts and opportunity cost of funds blocked in the receivables.
- c. to maintain the debtors at minimum according to the credit policy offered to customers.
- d. to offer cash discounts suitably depending on the cost of receivables, bank rate of interest and opportunity cost of funds blocked in the receivables.

### COSTS OF MAINTAINING RECEIVABLES

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

1. 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 payments 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 awaiting for payments from its customers. Additional funds may either be raised from outside or out of profits retained in the business. In first the case, the firm has to pay interest to the outsider while in the latter case, there is an opportunity cost to the firm, i.e., the money which the firm could have earned otherwise by investing the funds elsewhere.
2. Administrative costs - The firm has to incur additional administrative costs for maintaining accounts receivable in the form of salaries to the staff kept for maintaining accounting records relating to customers, cost of conducting investigation regarding potential credit customers to determine their credit worthiness etc.
3. Collection costs - The firm has to incur costs for collecting the payments from its credit customers. Sometimes, additional steps may have to be taken to recover money from defaulting customers.
4. Defaulting costs - Sometimes after making all serious efforts to collect money from defaulting customers, the firm may not be able to recover the over dues because of the inability





of the customers. Such debts are treated as bad debts and have to be written off since they cannot be realized.

## BENEFITS OF MAINTAINING RECEIVABLES

a. Increase in Sales - Except a few monopolistic firms, most of the firms are required to sell goods on credit, either because of trade customers or other conditions. The sales can further be increased by liberalizing the credit terms. This will attract more customers to the firm resulting in higher sales and growth of the firm.

b. Increase in Profits - Increase in sales will help the firm (i) to easily recover the fixed expenses and attaining the break-even level, and (ii) increase the operating profit of the firm. In a normal situation, there is a positive relation between the sales volume and the profit.

c. Extra Profit - Sometimes, the firms make the credit sales at a price which is higher than the usual cash selling price. This brings an opportunity to the firm to make extra profit over and above the normal profit.

## 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

1. 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. predicts that there will be an increase of 20% in its credit sales for the expected that there will also be a 20% increase in the level of receivables.

For example, if a firm next period, it can be

2. Credit policies - The term credit policy refers to those decision variables that influence the amount of trade credit, i.e., the investment in receivables. These variables include the quantity 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 a 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 receivables.
- ii. Lenient credit policy will result in greater defaults in payments by financially weak customers thus resulting in increasing the size of receivables.

3. 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 from the date of credit sale.

### 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. For example, if the terms of cash discount are changed from "Net 30" to "2/10 Net 30", it means the credit period is of 30 days but in case customer pays in 10 days, he would get 2% discount on the amount due by him. Of course, allowing cash discount results in a loss to the firm because of recovery of fewer amounts 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. Thus, optimum credit policy occurs at a point where there is a "Trade-off" between liquidity and profitability.



### DETERMINANTS OF CREDIT POLICY

The following are the aspects of credit policy:

1. Level of credit sales required to optimize the profit.
2. Credit period i.e. duration of credit, whether it may be 15 days or 30 or 45 days etc.
3. Cash discount, discount period and seasonal offers.
4. Credit standard of a customer : 5 C's of credit :
  - a. Character of the customer i.e. willingness to pay.
  - b. Capacity——ability to pay.
  - c. Capital——financial resources of a customer.
  - d. Conditions——special conditions for extension of credit to doubtful customers and prevailing economic and market conditions and;
  - e. Collateral security.
5. Profits.
6. Market and economic conditions.
7. Collection policy.
8. Paying habits of customers.
9. Billing efficiency, record-keeping etc.
10. Grant of credit——size and age of receivables.

### OPTIMUM CREDIT POLICY

A firm should establish receivables policies after carefully considering both benefits and costs of different policies. These policies relate to:

- (i) Credit Standards,
- (ii) Credit Terms, and
- (iii) Collection Procedures.

Each of these have been explained below:

i. Credit standards - The term credit standards represent the basic criteria for extension of credit to customers. The levels of sales and receivables are likely to be high if the credit standards are relatively loose, as compared to a situation when they are relatively tight. The firm's credit standards are generally determined by the five "C's". Character, Capacity, Capital, Collateral and Conditions. Character denotes the integrity of the customer, i.e. his willingness to pay for the goods purchased. Capacity denotes his ability to manage the business. Capital denotes his financial soundness. Collateral refers to the assets which the customer can offer by way of security. Conditions refer to the impact of general economic trends on the firm or to special developments in certain areas of economy that may affect the



customer's ability to meet his obligations.

Information about the five C's can be collected both from internal as well as external sources. Internal sources include the firm's previous experience with the customer supplemented by its own well developed information system. External resources include customer's references,

trade associations and credit rating organisations such as Don & Brad Street Inc. of USA. This Organisation has more than hundred years experience in the field of credit reporting. It publishes a reference book six times a year containing information about important business firms region wise. It also supplies credit reports about different firms on request.

An individual firm can translate its credit information into risk classes or groups according to the probability of loss associated with each class. On the basis of this information, the firm can decide whether it will be advisable for it to extend credit to a particular class of customers.

ii. Credit terms - It refers to the terms under which a firm sells goods on credit to its customers. As stated earlier, the two components of the credit terms are (a) Credit Period and (b) Cash Discount. The approach to be adopted by the firm in respect of each of these components is discussed below:

(a) Credit period - Extending the credit period stimulates sales but increases the cost on account of more tying up of funds in receivables. Similarly, shortening the credit period reduces the profit on account of reduced sales, but also reduces the cost of tying up of funds in receivables. Determining the optimal credit period, therefore, involves locating the period where the marginal profits on increased sales are exactly offset by the cost of carrying the higher amount of accounts receivable.

(b) Cash discount - The effect of allowing cash discount can also be analysed on the same pattern as that of the credit period. Attractive cash discount terms reduce the average collection period resulting in reduced investment in accounts receivable. Thus, there is a saving in capital costs. On the other hand, cash discount itself is a loss to the firm. Optimal discount is established at the point where the cost and benefit are exactly offsetting.

iii. Collection procedures - A stringent collection procedure is expensive for the firm because of high out-of-pocket costs and loss of goodwill of the firm among its customers. However, it minimizes the loss on account of bad debts as well as increases savings in terms of lower capital costs on account of reduction in the size of receivables. A balance has therefore to be



stuck between the costs and benefits of different collection procedures or policies.

### CREDIT EVALUATION OF CUSTOMER

Credit evaluation of the customer involves the following 5 stages

- i. Gathering credit information of the customer through:
  - a. financial statements of a firm,
  - b. bank references,
  - c. references from Trade and Chamber of Commerce,
  - d. reports of credit rating agencies,
  - e. credit bureau reports,
  - f. firm's own records (Past experience),
  - g. other sources such as trade journals, Income-tax returns, wealth tax returns, sales tax returns, Court cases, Gazette notifications etc.
- ii. Credit analysis - After gathering the above information about the customer, the credit-worthiness of the applicant is to be analyzed by a detailed study of 5 C's of credit as mentioned above.
- iii. Credit decision - After the credit analysis, the next step is the decision to extend the credit facility to potential customer. If the analysis of the applicant is not upto the standard, he may be offered cash on delivery (COD) terms even by extending trade discount, if necessary, instead of rejecting the credit to the customer.
- iv. Credit limit - If the decision is to extend the credit facility to the potential customer, a limit may be prescribed by the financial manager, say, Rs. 25,000 or Rs. 1,00,000 or so, depending upon the credit analysis and credit-worthiness of the customer.

Collection procedure - A suitable and clear-cut collection procedure is to be established by a firm and the same is to be intimated to every customer while granting credit facility. Cash discounts may also be offered for the early payment of dues. This facilitates faster recovery.

### FACTORING

Factoring is a business involving a continuing legal relationship between the factor and a business concern selling goods & services to its customers where by the factor purchases the clients accounts receivables and controls the credit extended to customers.



#### TYPES OF FACTORING

- 1) Full service non-resource factoring
- 2) Full service resource factoring
- 3) Advance factoring & maturity factoring
- 4) Bulk agency factoring
- 5) Non-notification factoring

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## UNIT IV

### INVENTORY MANAGEMENT

Inventory constitutes an important item in the working capital of many business concerns. Net working capital is the difference between current assets and current liabilities. Inventory is a major item of current assets. The term inventory refers to the stocks of the product of a firm is offering for sale and the components that make up the product. Inventory is stores of goods and stocks. This includes raw materials, work-in-process and finished goods. Raw materials consist of those units or input which are used to manufacture goods that require further processing to become finished goods.

Inventory management refers to an optimum investment in inventories. It should neither be too low to effect the production adversely nor too high to block the funds unnecessarily. Excess investment in inventories is unprofitable for the business. Both excess and inadequate investment in inventories are not desirable. The firm should operate within the two danger points. The purpose of inventory management is to determine and maintain the optimum level of inventory investment.

### OBJECTIVES OF INVENTORY MANAGEMENT

- First, a mismanaged inventory can lead to an unnecessary increase in the working capital. The excess funds could have been fruitfully directed to fuel the company's growth initiatives or research and development efforts.
- Second, effective inventory management would lead to low storage costs, which will in turn lead to an increase in the company's profits. Storage space is expensive; if you are able to manage your inventory well and able to reduce the amount of goods that you need to store, then you will require less space, which will in turn lead to low warehouse rental costs.
- Third, it can help you satisfy your customers by providing them with the products they need in the swiftest manner. Poor inventory management leads to lower availability of goods and higher delivery time. Hence, if you want to gain those service satisfaction stars, you need to manage your inventory well.
- Fourth, goods stored in inventory over a long period may spoil. This leads to unnecessary overheads in operating a business. Hence, proper inventory management can help you reduce those costs greatly.
- Fifth, if you have inventories scattered in various locations, you need a proper system to manage those inventories on the basis of demand and supply. Inventory management techniques can help you go a long way in managing multiple inventories.

### NATURE OF INVENTORIES



- Quality - inventory can be a “buffer” against poor quality; conversely, low inventory levels may force high quality
- Speed - *location* of inventory has gigantic effect on speed
- Flexibility - location, level of anticipatory inventory both have effects
- Cost - direct: purchasing, delivery, manufacturing indirect: holding, stockout. EG - HR systems may promote this-3 year postings

## TECHNIQUES OF INVENTORY CONTROL

### A. ECONOMIC ORDERING QUANTITY (EOQ)

It is important to note that only the correct quantity of materials is to be purchased. For this purpose, the factors such as maximum level, minimum level, danger level, re-ordering level, and quantity already on order, quantity reserved, availability of funds, quantity discount, and interest on capital, average consumption and availability of storage accommodation are to be kept in view. There should not be any over stock vis-à-vis no question of non-stock. Balance should be made between the cost of carrying and cost of non-carrying i.e. cost of stock-out.

Economic Ordering Quantity (EOQ) is the quantity fixed at the point where the total cost of ordering and the cost of carrying the inventory will be the minimum. If the quantity of purchases is increased, the cost of ordering decreases while the cost of carrying increases. If the quantity of purchases is decreased, the cost of ordering increases while the cost of carrying decreases. But in this case, the total of both the costs should be kept at minimum. Thus, EOQ may be arrived at by Tabular method by preparing purchase order quantity tables showing the ordering cost, carrying cost and total cost of various sizes of purchase orders.

Economic Ordering Quantity may also be worked out mathematically by using the following formula:

$$EOQ = \sqrt{\frac{2AB}{C}}$$

Where,

EOQ = Economic Ordering Quantity

A= Annual usage

B= Buying Cost

C= Cost of Carrying One Unit expressed as percentage



Note: Buying Cost is the ordering cost.

## B. FIXING LEVELS (QUANTITY CONTROL)

For fixing the various levels such as maximum, minimum, etc., average consumption and lead time i.e. the average time taken between the initiation of purchase order and the receipt of materials from suppliers are to be estimated for each item of materials.

a. Maximum Stock Level - The maximum stock level is that quantity above which stocks shouldnot normally be allowed to exceed. The following factors are taken into consideration while fixing the maximum stock level:

1. Average rate of consumption of material.
2. Lead time.
3. Re-order level.
4. Maximum requirement of materials for production at any time. Total Cost  
Carrying Costs Ordering Cost Quantity per order Cost
5. Storage space available cost of storage and insurance.
6. Financial consideration such as price fluctuations, availability of capital, discounts due to seasonal and bulk purchases, etc.
7. Keeping qualities e.g. risk of deterioration, obsolescence, evaporation, depletion and natural waste, etc.
8. Any restrictions imposed by local or national authority in regard to materials i.e.  
purchasing from small scale industries and public sector undertakings, price preference clauses, import policy, explosion in case of explosive materials, risk of fire, etc.; and
9. Economic ordering quantity is also considered.

### Formula

Maximum Level = Re-order level—(Minimum consumption) × (Minimum lead times) + Reordering quantity

b. Minimum Stock Level - The minimum stock level is that quantity below which stocks shouldnot normally be allowed to fall. If stocks go below this level, there will be danger of stoppage of production due to shortage of supplies. The following factors are taken into account while fixing the minimum stock level:

1. Average rate of consumption of material.
2. Average lead time. The shorter the lead time, the lower is the minimum level.
3. Re-order level.
4. Nature of the item.



5. Stock out cost.

*Formula*

$$\text{Minimum Level} = \text{Re-order level} - (\text{Average usage} \times \text{Average lead time})$$

c. Re-order Level - This is the point fixed between the maximum and minimum stock levels and at this time, it is essential to initiate purchase action for fresh supplies of the material. In order to cover the abnormal usage of material or unexpected delay in delivery of fresh supplies, this point will usually be fixed slightly higher than the minimum stock level. The following factors are taken into account while fixing the re-order level:

1. Maximum usage of materials
2. Maximum lead time
3. Maximum stock level
4. Minimum stock level

*Formula*

$$\text{Re-order level} = \text{Maximum usage} \times \text{Maximum lead time or Minimum level} + \text{Consumption during lead time.}$$

Re-ordering Quantity (How much to purchase): It is also called Economic Ordering Quantity.

d. Danger Level - This is the level below the minimum stock level. When the stock reaches this level, immediate action is needed for replenishment of stock. As the normal lead time is not available, regular purchase procedure cannot be adopted resulting in higher purchase cost. Hence, this level is useful for taking corrective action only. If this is fixed below the re-order level and above the minimum level, it will be possible to take preventive action.

### C. ABC ANALYSIS FOR VALUE OF ITEMS CONSUMED

ABC Analysis for Inventory Control: ABC analysis is a method of material control according to value. The basic principle is that high value items are more closely controlled than the low value items. The materials are grouped according to the value and frequency of replenishment during a Period.

- 'A' Class items: Small percentage of the total items but having higher values.
- 'B' Class items: More percentage of the total items but having medium values.
- 'C' Class items: High percentage of the total items but having low values.



Illustration :

A manufacturing concern is having 1,000 units of materials valuing Rs. 1,00,000 in total. Prepare the statement showing the stock according to ABC Analysis.

	Quantity		Value		Average values Rs.
Category	%	No. of items	%	Amount	
A (High value items)	10	100	70	70000	$70,000 \div 100 = 700$
B (Medium value items)	20	200	20	20000	$20,000 \div 100 = 200$
C (Low value items)	70	700	10	10000	$10,000 \div 700 = 14$
	100%	1000	100%	100000	

For the sake of simplicity, the above percentage has been considered. But in practice, the percentage may vary between 5% to 10%, 10% to 20% and 70% to 85%.

In foreign countries, Bin Cards and Stores Ledger Cards are not maintained for 'C' class items. These are issued directly to the production foreman concerned and controlled through norms of consumption based on production targets. By doing this, 70% of the effort required for maintaining the Bin Cards and Stores Ledger Cards is eliminated. With 30% of the effort, an organization will be able to exercise control on the 90% of the inventory values. This reduces the clerical costs and ensures the closer control on costly items in which large amount of capital is invested.

The general procedure for classifying A, B or C items is as follows :

1. Ascertain the cost and consumption of each material over a given period of time.
2. Multiply unit cost by estimated usage to obtain net value.
3. List out all the items with quantity and value.
4. Arrange them in descending order in value i.e., ranking according to value.
5. Ascertain the monetary limits for A, B or C classification.





6. Accumulate value and add up number of items of A items. Calculate percentage on total inventory in value and in number.
7. Similar action for B and C class items.

### Advantages of ABC Analysis

1. To minimize purchasing cost and carrying cost (i.e. holding cost).
2. Closer and stricter control on these items which represent a high portion of total stock value.
3. Ensuring availability of supplies at all times.
4. Clerical costs can be reduced.
5. Inventory is maintained at optimum level and thereby investment in Inventory can be regulated and will be minimum. 'A' items will be ordered more frequently and as such the investment in inventory is reduced.
6. Maintaining enough safety stock for 'C' items.
7. Equal attention to A, B and C items is not desirable as it is expensive.
8. It is based on the concept of Selective Inventory Management and it helps in maintaining high stock-turnover ratio.

### A. Perpetual Inventory System

The Institute of Cost and Management Accountants, London defines the perpetual inventory system as "A system of records maintained by the controlling department, which reflects physical movements of stocks and their current balance."

This system consists of the following three:

- a. Bin cards i.e. Quantitative Perpetual Inventory.
- b. Stores ledger i.e. Quantitative and Value Perpetual Inventory.
- c. Continuous Stock taking i.e. Physical Perpetual Inventory.

### B. H.M.L. Classification

In ABC analysis, the consumption value of items has been taken into account. But in this case, the unit value of stores items is considered. The materials are classified according to their unit value as high, medium or low valued items. Combining ABC analysis and HML classification, it will be more useful to an organization in the sense that the low value components having substantial consumption, that is to say, a small item costing Re. 1 each consumed a lakh numbers will cost Rs.1.00 lakh which is quite high and it is to be controlled properly.

### C. F S N Analysis

According to this approach, the inventory items are categorized into 3 types. They are fast





moving, slow moving and non moving. Inventory decisions are very carefully taken in the case of 'non moving category'. In the case of item of fast moving items, the manager can take decisions quite easily because any error happened will not trouble the firm so seriously. Since risk is less in fast moving items, because they can be consumed quickly unlike the non- moving category which are carried in the godowns for more time period.

As risk is high in case of slow – moving and non – moving – items, the inventory decisions have to be taken carefully without affecting the objectives of profitability and liquidity of the organization.

#### D. V.E.D. Classification

The V.E.D. classification is applicable mainly to the spare parts. Spares are classified as vital (V), essential (E) and desirable (D). Vital class spares have to be stocked adequately to ensure the operations of the plant but some risk can be taken in the case of 'E' class spares. Stocking of desirable spares can even be done away with if the lead time for their procurement is low.

Similarly, classification may be done in respect of the plant and machinery as vital, essential, important and normal (VEIN). If the classifications VED and VEIN are combined, there will be 12 different classes as follows:

Vital spares for vital plant, vital spares for essential plant, vital spares for important plant and vital spares for normal plant. Essential spares for essential plant, essential spares for important plant, essential spares for normal plant and essential spares for vital plant, Desirable spares for essential plant, desirable spares for important plant, desirable spares in vital plant and desirable spares for normal plant.

#### E. Just in Time (JIT)

Normally, inventory costs are high and controlling inventory is complex because of uncertainties in supply, dispatching, transportation etc. Lack of coordination between suppliers and ordering firms is causing severe irregularities, ultimately the firm ends-up in inventory problems. Toyota Motors has first time suggested just – in – time approach in 1950s. This means the material will reach the points of production process directly from the suppliers as per the time schedule. It is possible in the case of companies with respective process. Since, it requires close coordination between suppliers and the ordering firms, and therefore, only units with systematic approach will be able to implement it.

#### F. Inventory Turnover Ratio

i) Inventory Turnover Ratio:  $\text{Cost of goods sold} / \text{average total inventories}$ . The higher the



ratio, more the efficiency of the firm

ii) Work in process turnover ratio =

$\text{Cost of goods sold} / \text{Average inventory of finished goods at costs}$  Here, in this ratio also higher the ratio, more the efficiency of the firm.

iii) Weeks inventory of finished goods on hand  $\rightarrow \text{Finished Goods} / \text{Weekly sales of finished goods}$

The ratio reveals that the lower the ratio, the higher the efficiency of the firm

iv) Weeks raw material on order  $\rightarrow \text{Raw material on order} / \text{Weekly consumption of raw material}$ .

This ratio indicates that the lower the ratio, the higher the efficiency of the firm.

v) Average age of raw material inventory  $\rightarrow \text{Average raw material inventory at cost} / \text{Average daily purchases of raw material}$

This ratio says that the lower the ratio the higher the efficiency of the firm.

vi) Average age of finished goods inventory  $\rightarrow \text{Average finished goods inventory at cost} / \text{Average cost of finished goods manufactured per day}$ .

This ratio indicates that the lower the ratio the higher the efficiency of the firm.

i) Out of stock index  $\rightarrow \text{No. of times out of stock} / \text{No. of items requisitioned}$  This ratio indicates the lower the ratio higher the efficiency of the firm.

ii) Spare parts index  $\rightarrow \text{Value of spare parts inventory} / \text{Value of capital equipment}$   
This ratio reveals that the higher the ratio the more the efficiency of the firm.



## UNIT V

### WORKING CAPITAL FINANCE

What is Working Capital?

A business's working capital is equivalent to the amount of cash it can deploy very rapidly, as such even very profitable businesses can have working capital problems, in particular this can develop because of long dated payments from clients.

MarketInvoice's unique offering

Unlike conventional working capital solutions, MarketInvoice doesn't charge clients monthly fees, or require them to use MarketInvoice a certain number of times a year allowing firms maximum flexibility. We don't ask for a personal guarantee or demand onerous charges. We can also offer a completely confidential service.

Working capital explained

Working capital is the financing in a small business that helps a company pay its trade creditors and cash flow – it is the finance that businesses need for their day-to-day trading operations. All businesses require working capital, but sometimes they are unable to access the cash that they need because they have to wait for large invoices to be paid – sometimes for up to 90 days.

There was a time when your bank would gladly help you through short-term cashflow difficulties with a loan or overdraft extension, but it's become much tougher to access to bank finance. Even if you are successful, it can take can weeks to sort out – and you'll probably have to provide a personal guarantee.

Another alternative is factoring, or a loan.

Short Term Sources of Working Capital Financing

Factoring-Factoring is a traditional source of short term funding. Factoring facility arrangements tend to be restrictive and entering into a whole-turnover factoring facility can lead to aggressive chasing of outstanding invoices from clients, and a loss of control of a company's credit function.

Instalment Credit-Instalment credit is a form of finance to pay for goods or services over a period through the payment of principal and interest in regular payments.

Invoice Discounting-Invoice Discounting is a form of asset based finance which enables a business to release cash tied up in an invoice and unlike factoring enables a client to retain control of the administration of its debtors.

Why not read more about how to compare invoice discounting with factoring?

Income received in advance-Income received in advance is seen as a liability because it is money that does not correlate to that specific accounting or business year but rather for one



that is still to come. The income account will then be credited to the income received in advance account and the income received in advance will be debited to the income account such as rent.

Advances received from customers-A liability account used to record an amount received from a customer before a service has been provided or before goods have been shipped.

Bank Overdraft-A bank overdraft is when someone is able to spend more than what is actually in their bank account. The overdraft will be limited. A bank overdraft is also a type of loan as the money is technically borrowed.

Commercial Papers-A commercial paper is an unsecured promissory note. Commercial paper is a money-market security issued by large corporations to get money to meet short term debt obligations e.g.payroll, and is only backed by an issuing bank or corporation's promise to pay the face amount on the maturity date specified on the note. Since it is not backed by collateral, only firms with excellent credit ratings will be able to sell their commercial paper at a reasonable price.

Trade finance-An exporter requires an importer to prepay for goods shipped. The importer naturally wants to reduce risk by asking the exporter to document that the goods have been shipped. The importer's bank assists by providing a letter of credit to the exporter (or the exporter's bank) providing for payment upon presentation of certain documents, such as a bill of lading. The exporter's bank may make a loan to the exporter on the basis of the export contract.

Letter of Credit-A letter of credit is a document that a financial institution issues to a seller of goods or services which says that the issuer will pay the seller for goods/services the seller delivers to a third-party buyer. The issuer then seeks reimbursement from the buyer or from the buyer's bank. The document is essentially a guarantee to the seller that it will be paid by the issuer of the letter of credit regardless of whether the buyer ultimately fails to pay. In this way, the risk that the buyer will fail to pay is transferred from the seller to the letter of credit's issuer.

### Long Term Sources of Working Capital Financing

Equity Capital-Equity capital refers to the portion of a company's equity that has been obtained (or will be obtained) by trading stock to a shareholder for cash or an equivalent item of capital value. Equity comprises the nominal values of all equity issued (that is, the sum of their "par values"). Share capital can simply be defined as the sum of capital (cash or other assets) the company has received from investors for its shares.

Loans-A loan is a type of debt which it entails the redistribution of financial assets over time, between the lender and the borrower. In a loan, the borrower initially receives or borrows an amount of money from the lender, and is obligated to pay back or repay an equal amount of money to the lender at a later time. Typically, the money is paid back in regular instalments, or partial repayments; in an annuity, each instalment is the same amount. Acting as a provider



of loans is one of the principal tasks for financial institutions like banks. A secured loan is a loan in which the borrower pledges some asset (e.g. a car or property) as collateral. Unsecured loans are monetary loans that are not secured against the borrower's assets.

What is working capital finance?

Working capital finance is defined as the capital of a business that is used in its day-to-day trading operations, calculated as the current assets minus the current liabilities. For many companies, this is wholly comprised of trade debtors (that is, bills outstanding) and trade creditors (bills the company in question has yet to pay).

Sources of working capital finance

Factoring facilities are traditional sources of working capital. Factoring facility arrangements tend to be restrictive and entering into a whole-turnover factoring facility can lead to aggressive chasing of outstanding invoices from clients, and a loss of control of a company's credit function. Since factoring is an unregulated activity in the UK, factors have the power to turn off a credit line when they choose, starving many companies of the working capital needed to capitalise on growth opportunities.

Different providers for SMEs in the market

Despite the large numbers of providers of working capital finance, there is limited competition on pricing and structure of factoring facilities, primarily because all their funding comes from the same capital providers (the commercial finance divisions of the major high street banks). There is some competition on service between the independents, but once a company has signed up for 18 months, there are significant switching costs, and the factor effectively holds a monopoly over the business.

How Market Invoice can help SMEs with Working Capital Finance

Market invoice is very different to the main short term source of working capital finance, factoring. Our three main advantages are flexibility, cost and scope.

- In terms of flexibility, using Market invoice you sell the invoices that you want, when you want
- Unlike traditional invoice discounting, there is no obligation to discount your entire debtor ledger
- No lengthy lock-in periods

Market invoice puts you back in control of your cash flow as we provide a solution to late payments. Good credit management is absolutely necessary for a small growing business however late payments are fact of life even for the best-run businesses. We see ourselves as providing those well-run businesses with working capital and cashflow solutions, an area which hasn't been satisfactorily filled by existing players in the market





### **Determining the working capital financing mix-**

1. **Assess Current Working Capital Needs:** Understand the company's current working capital requirements by analyzing its operating cycle, cash conversion cycle, and seasonal fluctuations in cash flows.
2. **Evaluate Internal Sources:** Look at internal sources of financing first, such as retained earnings or excess cash reserves. Using internal funds can be advantageous as it avoids interest costs and does not dilute ownership.
3. **Short-Term Financing Options:** Evaluate short-term financing options like trade credit, bank overdrafts, and lines of credit. These are suitable for financing short-term needs and managing cash flow fluctuations.
4. **Medium-Term Financing Options:** Consider medium-term financing options like term loans or leasing arrangements for assets that require longer-term financing but still have a defined lifespan.
5. **Assess Cost of Capital:** Compare the cost of different financing options, including interest rates, fees, and other associated costs. Choose the most cost-effective options to minimize the overall cost of financing.
6. **Analyze Risk:** Evaluate the risk associated with each financing option, including interest rate risk, default risk, and covenant requirements. Balance risk considerations with the company's risk tolerance and financial stability.
7. **Maintain Flexibility:** Maintain flexibility in the financing mix to adapt to changing market conditions and business needs. Avoid overly restrictive financing arrangements that could constrain the company's ability to respond to opportunities or challenges.
8. **Consider Tax Implications:** Evaluate the tax implications of different financing options, including deductibility of interest expenses and potential tax benefits associated with certain financing instruments.
9. **Optimize the Mix:** Strive to optimize the working capital financing mix to achieve a balance between cost, risk, and flexibility. This may involve using a combination of internal funds, short-term financing, and medium-term financing to meet the company's short-term operational needs effectively.
10. **Monitor and Adjust:** Continuously monitor the working capital financing mix and adjust it as needed based on changes in the company's financial position, market conditions, and strategic objectives.

### **New trends in financing of working capital by banks-**





1. **Digitalization and Automation:** Banks were increasingly adopting digital platforms and automated processes to streamline working capital financing. This included online application processes, digital document management, and automated approval workflows, making it easier and faster for businesses to access financing.
2. **Data-driven Decision Making:** Banks were leveraging big data and analytics to make more informed decisions about working capital financing. By analyzing a company's financial data, transaction history, and performance metrics, banks could better assess creditworthiness and tailor financing solutions to meet the specific needs of businesses.
3. **Supply Chain Finance:** Supply chain finance programs were gaining popularity as banks collaborated with buyers and suppliers to optimize working capital throughout the supply chain. These programs offered benefits such as early payment discounts for suppliers and extended payment terms for buyers, improving cash flow for all parties involved.
4. **Peer-to-peer Lending Platforms:** Peer-to-peer lending platforms were emerging as alternative sources of working capital financing for businesses. These platforms connected borrowers directly with investors, bypassing traditional banks and offering more flexible terms and faster funding options.
5. **Sustainable Finance:** Banks were increasingly integrating environmental, social, and governance (ESG) criteria into their working capital financing decisions. This included offering incentives for sustainable practices and providing financing for projects that aligned with ESG goals, reflecting growing demand from businesses and investors for environmentally and socially responsible financing options.
6. **Invoice Financing and Factoring:** Invoice financing and factoring solutions were becoming more popular for businesses looking to unlock cash tied up in accounts receivable. Banks were offering flexible financing options based on outstanding invoices, providing businesses with immediate access to working capital without waiting for customers to pay.
7. **Collaboration with Fintechs:** Banks were collaborating with fintech companies to enhance their working capital financing offerings. This collaboration involved integrating fintech solutions such as AI-powered credit scoring, blockchain-based supply chain finance, and digital invoice processing into traditional banking services, providing businesses with innovative and efficient financing solutions.

### latest committees regarding working capital-

#### Kannan Committee-

In view of the ongoing liberalization in the financial sector, the Indian Banks Association (IBA) constituted a committee headed by Shri K. Kannan, Chairman and Managing Director of Bank of Baroda to examine all the aspects of working capital finance including assessment



of maximum permissible bank finance (MPBF). The Committee submitted its report on 25th February, 1997.

It recommended that the arithmetical rigidities imposed by Tandon Committee (and reinforced by Chore Committee) in the form of MPBF computation so far been in practice, should be scrapped. The Committee further recommended that freedom to each bank be given in regard to evolving its own system of working capital finance for a faster credit delivery so as to serve various borrowers more effectively.

It also suggested that line of credit system (LCS), as prevalent in many advanced countries, should replace the existing system of assessment/fixation of sub-limits within total working capital requirements.

The Committee proposed to shift emphasis from the Liquidity Level Lending (Security Based Lending) to the Cash Deficit Lending called Desirable Bank Finance (DBF). Some of the recommendations of the committee have already been accepted by the Reserve Bank of India with suitable modifications.

## **Marathe Committee**

The Reserve Bank of India, in 1982, appointed a committee under the chairmanship of Marathe to review the working of Credit Authorisation Scheme (CAS) and suggest measures for giving meaningful directions to the credit management function of the Reserve Bank. The recommendations of the committee have been accepted by the Reserve Bank of India with minor modifications.

The principal recommendations of the Marathe Committee include:

(i) The committee has declared the Third Method of Lending as suggested by the Tanden Committee to be dropped. Hence, in future, the banks would provide credit for working capital according to the Second Method of Lending.

(ii) The committee has suggested the introduction of the 'Fast Track Scheme' to improve the quality of credit appraisal in banks. It recommended that commercial banks can release without prior approval of the Reserve Bank 50% of the additional credit required by the borrowers (75% in case of export oriented manufacturing units) where the following requirements are fulfilled:

(a) The estimates/projections in regard to production, sales, chargeable current assets, other current assets, current liabilities other than bank borrowings, and net working capital are



reasonable in terms of the past trends and assumptions regarding most likely trends during the future projected period.

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(b) The classification of assets and liabilities as 'current' and 'non-current' is in conformity with the guidelines issued by the Reserve Bank of India.

(c) The projected current ratio is not below 1.33 : 1.

(d) The borrower has been submitting quarterly information and operating statements (Form I, II and III) for the past six months within the prescribed time and undertakes to do the same in future also.

(e) The borrower undertakes to submit to the bank his annual account regularly and promptly, further, the bank is required to review the borrower's facilities at least once in a year even if the borrower does not need enhancement in credit facilities.