

CHAPTER - IV

THEORETICAL
FRAMEWORK
OF THE STUDY

4.1 INTRODUCTION

Working capital is an integral part of overall financial management as current assets represent more than half of the total assets of a business. Being a matter of great importance for the survival and success of any industry, an efficient and effective management of working capital should be maintained. Thus, a study of working capital is of immense importance for internal and external analysis because it is closely linked with the current day-to-day operations of the business. Its control and management constitutes the major function of the finance department.

4.2 CONCEPTS OF WORKING CAPITAL AND WORKING CAPITAL MANAGEMENT

Working capital is the most important requirement for running any business smoothly and regularly. The estimation of working capital requirements is based on many factors therefore it is difficult to define the proportion of working capital required for running any business without interruptions. It means that there is no precise criterion applicable to all types of industries for determining working capital needs.

The phrase 'Working Capital' is one of the most misunderstood terms in financial and accounting terminology. This lack of understanding, or to put it differently, lack of uniformity in the application of the term, is probably intensified by the fact that the term does not appear in its account form of balance sheet.⁽¹⁾ In simple terms, working capital is the amount of funds which a company needs to finance its day-to-day operations. It is that portion of a company's total capital which is employed in short-term operations.⁽²⁾ In other words, working capital refers to a company's investment in short-term assets, i.e., cash, short-term securities, accounts receivable and inventories.⁽³⁾ Different views have been held regarding the definition of what constitutes working capital, depending upon the purpose for which the particular concept is employed.

Gross working capital refers to the total of current assets.⁽⁴⁾ The Committee on Accounting Procedure of the American Institute of Accountants says that the term 'current assets' is used to designate cash and other assets or resources commonly identified as those which are reasonably expected to be realised in cash or sold or consumed during the normal operating cycle of the business.⁽⁵⁾ The normal operating cycle of a business indicates the period from the stage of expenditure on materials, labour and other constituents of manufacturing costs through the stages of inventories or stocks of finished product and the sale of the product to the final stage of collection in cash of the proceeds of sales.⁽⁶⁾ The term 'current assets' also indicates cash and other assets which are expected to be converted into cash in the ordinary course of business within one year.⁽⁷⁾ Baker and Malott,⁽⁸⁾ Mead,⁽⁹⁾ Fied,⁽¹⁰⁾ Bogen,⁽¹¹⁾ Dewing,⁽¹²⁾ Sen,⁽¹³⁾ Pandey,⁽¹⁴⁾ Husband and Dockeray,⁽¹⁵⁾ Satapathy and Panda,⁽¹⁶⁾ Firth,⁽¹⁷⁾ Panda,⁽¹⁸⁾ Mehta,⁽¹⁹⁾ Archer,⁽²⁰⁾ Sahoo,⁽²¹⁾ Jain,⁽²²⁾ Sharma,⁽²³⁾ Varanasy and Murthy,⁽²⁴⁾ Cohen and Robbins,⁽²⁵⁾ Mishra,⁽²⁶⁾ Hampton,⁽²⁷⁾ Romamoorthy,⁽²⁸⁾ Kuchhal,⁽²⁹⁾ endorse the same view regarding gross working capital.

'Net Working Capital' is defined as excess of current assets over current liabilities.⁽³⁰⁾ Agrawal,⁽³¹⁾ Guthmann and Dougall,⁽³²⁾ Gerstenberg,⁽³³⁾ Wixon,⁽³⁴⁾ Saliers,⁽³⁵⁾ Lincoln,⁽³⁶⁾ Stevens,⁽³⁷⁾ Park and Gladson,⁽³⁸⁾ Gole,⁽³⁹⁾ Kennedy and McMullen,⁽⁴⁰⁾ Gitman,⁽⁴¹⁾ Mayer,⁽⁴²⁾ National Council of Applied Economic Research,⁽⁴³⁾ Weston and Brigham,⁽⁴⁴⁾ Howard,⁽⁴⁵⁾ Grass,⁽⁴⁶⁾ Sharma,⁽⁴⁷⁾ Mishra,⁽⁴⁸⁾ Firth,⁽⁴⁹⁾ Doris,⁽⁵⁰⁾ hold the same view. To the businessman, working capital comprises the current assets of a business. Economists like Lincoln, Saliers and Stevens also use the phrase 'Working Capital' to mean excess of current assets in a business over current liabilities.⁽⁵¹⁾ The credit man, the accountant and the investment analyst, usually define working capital as only the excess of current assets over current liabilities, i.e., net current assets⁽⁵²⁾

Both the concepts of working capital have operational significance. The choice between the gross and net working capital depends upon the purpose of the study. The proponents of the gross working capital feel that gross

working capital contributes to the earnings of the company, it constitutes the total funds available for operational purposes. In a going concern, the gross working capital may be used for assessing the size of working capital as well as to optimize the productivity of other assets. Many financial analysts feel that the ratio of productivity to working capital is more meaningful if it is defined as sales divided by gross current assets.⁽⁵³⁾

The concept gross working capital focuses attention on two aspects of current assets management: (i) optimum investment in current assets, and (ii) financing of current assets. The investment in current assets should be adequate to fulfill the requirements of a company. Excessive investment in current assets impairs profitability while inadequate amount of current assets threatens the solvency of a company and it fails to meet the current obligations. Another contribution of gross working capital is that it points out the need for funds to finance current assets and it also facilitates a better control of current assets.

The concept 'Net Working Capital', i.e., the excess of current assets over current liabilities indicates the liquidity position of the company and suggests the working capital needs financed by permanent sources of funds. Under this concept, short-term bank borrowings, which is about 75 per cent of working capital requirements, cannot be shown as the source of working capital. The efficiency of the uses of working capital is derived by showing the turnover of gross working capital.⁽⁵⁴⁾ Financial analysts think that where the objective of measurement is to appraise the efficiency of management in the uses of capital, the capital base should be the total current assets.

The fundamental object of the working capital management is to determine the optimum level of investment in each of the current assets. Therefore, for the purpose of the present study, total current assets are taken as the working capital in the industrial companies while excess of current assets over current liabilities is taken as net working capital. If the term working capital is used without further qualifications, it refers to gross working capital.

Working capital management consists of the following:⁽⁵⁵⁾

- a) Determining the requirements of working capital.
- b) Financing the requirements.
- c) Efficient utilisation of the components of working capital.

The management of working capital is defined as the management of liquid assets, which can be divided into four categories, i.e., cash, marketable securities, accounts receivable and inventories.⁽⁵⁶⁾ In other words, working capital management is concerned with the management of the company's current accounts which include current assets and current liabilities.⁽⁵⁷⁾ The object of working capital management is to manage each of the company's current assets in such a way that an acceptable level of net working capital is maintained.

According to Gibbs,⁽⁵⁸⁾ working capital management is an attempt to know the following:

- i) How much working capital should a business hold?
- ii) What proportions of current assets should be in the different forms of current assets?
- iii) How should working capital be financed?

Ramamoorthy⁽⁵⁹⁾ defines working capital management as to focus attention on the most effective choice of working capital sources and the most effective operating combination and management of current assets. It includes the following activities:

- a) selection of appropriate sources for financing the current assets,
- b) preparedness to meet current obligations as and when they mature,
- c) decisions on the right level and composition of current assets, and
- d) efficient management of different categories of current assets and current liabilities.

The fundamental object of the working capital management is to increase the profitability and the solvency of the business. Survival and growth of a company depend on its profitability and solvency. Controlling of stock and speedier collection of debts release the tied up working capital, increase the turnover of working capital and enhance the profitability or return on capital

employed Solvency rests on a continuing state of liquidity and is a function of the degree of liquidity attached to the current assets. Maintenance of sound liquidity position may enhance profits provided liquidity level is in harmony with the nature of the enterprise.

For the purpose of the present study, working capital management is concerned with the requirements of working capital, financing the requirement of working capital and efficient utilisation of the components of working capital. Working capital management is mainly related to the adequacy of inventory, receivables, cash and bank balances and working capital finance in the industrial companies of Jordan during the period under study i.e , 1987 to 1996.

4.3 ADEQUACY OF WORKING CAPITAL

Adequacy of working capital is of prime importance for the success of a business. For smooth running of any concern, an adequate amount of working capital is very essential. In its absence fixed assets cannot gainfully be utilized.⁽⁶⁰⁾ The benefits of adequate working capital are as follows:⁽⁶¹⁾

- a) It saves the business from the adverse decrease in the value of current assets.
- b) It facilitates prompt payment of all current obligations and availing of the discount facilities.
- c) It facilitates the maintenance of a company's credit position and enables it to face the emergencies like strike, fire, flood, etc.
- d) It permits the carrying of adequate inventories to serve the customers' need satisfactorily
- e) It facilitates the extension of credit terms to customers.
- f) It helps the business to operate more efficiently through proper materials, sources and stores due to credit facilities.

4.4 EXCESS AND SHORTAGE OF WORKING CAPITAL

The company should maintain a sound working capital position. It must have adequate working capital to run its business operations. Both excess as

well as shortage of working capital is dangerous for the business. Excessive working capital means the idle fund which earns no profit for the business, while shortage of working capital hampers the company's profitability through break-up in production and efficiency. Excessive and liberal availability of working capital can also lead to irresponsible behavior on the part of management. A proper balance between the requirement and the availability is, therefore, most essential.⁽⁶²⁾ The impact of excessive working capital is as follows:

- i) It leads to unnecessary accumulation of inventories and the chances of inventory mishandling, waste, theft and losses.
- ii) It leads to the creation of idle fund. It involves a loss of interest or income and often leads to investments in undesirable items.
- iii) It may lead to carelessness about costs and efficiency of operations
- iv) It causes managerial inefficiency.
- v) It may create difficulty when the company fails to make speculative profit
- vi) A company may invest heavily in its fixed equipment which may not be justified by actual sales or production. This may provide a fertile ground for over-capitalization later

Shortage of working capital is also dangerous due to the following reasons:

- i) It results in creating a hindrance for the enterprise. Due to shortage of working capital, the company can not undertake profitable projects
- ii) An enterprise can not achieve its profit target, due to its inability to implement operating plans.
- iii) An enterprise will not be able to pay dividends due to shortage of funds
- iv) An enterprise may force to borrow funds at higher interest
- v) An enterprise may not be able to take advantage of cash discount facilities
- vi) It restricts the activities to credit sales only because it is unaffordable to increase the cash sales
- vii) Operating inefficiencies creep in when it become difficult even to meet day-to-day commitments.

viii) An enterprise faces tight credit terms due to degradation of status, and it is not in a position to honour its short term obligations.

Thus, for a continuous functioning of an enterprise, a proper management of working capital with its right amount on a continuous basis has to be maintained. Sound financial and statistical techniques, supported by judgment, should be used to predict the quantum of working capital needed at different time periods.

4.5 STRUCTURE OF WORKING CAPITAL

The structure of working capital refers to the elements of current assets and current liabilities of a company during a particular period of time. The elements of current assets are inventory, receivables, cash and bank balances, and other liquid resources like short-term or temporary investments.⁽⁶³⁾ While current liabilities generally consist of the short-term bank borrowing, trade credit and advanced received, assessed tax, unpaid dividend, and other current provisions.⁽⁶⁴⁾

The management of any company should try to make maximum utilisation of its components at the minimum possible cost. This is highly dependent on the structure of working capital. The financial manager of a company should take care of the following important factors of working capital structure:

Inventory

Inventory is the most important component of working capital structure and generally occupy a major portion of current assets of a business enterprise. It has significant contribution to the maximization of profit and income which mainly depends upon the turnover of working capital. The turnover of working capital, in turn, is mostly determined by the turnover of inventories. The phrase 'inventory' according to the American Institute of Accountants, designates the aggregate of those items of tangible personal property which (a) are held for sale in the ordinary course of business, (b) are in the process of production for sale, or (c) are to be currently consumed in the

production of goods or services to be available for sale.⁽⁶⁵⁾ The various forms in which inventories exist in a manufacturing company are raw materials, work-in-process, finished goods and spare parts and stores

Raw material is the backbone of inventories for manufacturing a product. The most essential element and basic input for production is the raw materials. These raw materials are converted into finished goods through the manufacturing process. These are held in their original form for processing and production. Work-in-process inventories are semi-manufactured products which are held to ensure that production is not interrupted. They represent the raw materials upon which work has been done to change their form, size and properties. Finished goods comprise completely manufactured and inspected goods which are ready for sale. Spare parts and stores are consumed in the creation of goods and services.

Stocks of raw materials and work-in-process facilitate production and stock of finished goods is needed for the smooth functioning of marketing operation. Inventories serve as a link between production and distribution of goods.

Receivables

Receivables hold a second important component of working capital structure. It arises out of delivery of goods or rendering of services and includes book accounts, notes, bills and accrued receivables. It also includes all claims held against others for the future receipt of money, goods and services and in the broader sense, covers prepayments on purchase and expenses contract and advances to subsidiaries and others ⁽⁶⁶⁾ A company grants trade credit to attract the potential customers to buy its products at favourable terms. Trade credit thus creates receivables which the company is expected to receive in the near future. The main characteristics of receivables are as follows

- a) It involves an element of risk which needs to be carefully analysed
- b) It is based on economic value.
- c) It implies futurity

The various items included in receivables are mainly notes, bills, accrued receivables, prepayments, loans and advances. Notes arise through sale of goods and indicate the undertakings by the debtors to pay and are often honoured promptly. Trade acceptances are the bills received from the customers and can be discounted before the maturity date. Accrued receivables refer to the receivables arising from periodic adjustment of sales. Prepayment means the payment made in advance for the receipt of goods and services. Insurance premium, rent, prepaid tax and other advances are included in it. Loans and advances include amount advanced against purchase of fixed assets, stores and spares, share of deposit with customers and other authorities, advances to the employees and officers of the company. Receivables depend mainly on the credit policy and the credit policy depends on the collection policy of the company.

Cash

The term cash includes coins, currency and cheques held by the company and balance in its bank accounts, in the form of demand deposit, call loans, time deposits, etc.⁽⁶⁷⁾ Cash is the most important current asset for the operations of the business. Cash is both a means and an end of business operation. It is the most basic input needed to operate and to continue any business. It is also the ultimate output realised by selling the goods or services. Cash occupies an important place in the structure of working capital.

Thus, there is never a moment in the day-to-day life of a business enterprise, where cash is not considered important. For a business enterprise to survive, a company has to swim into what may be termed as “Niagara of Cash”. So, cash occupies an important place in the structure of working capital.

Temporary or Short Term Investment (Marketable Securities)

No one can deny that cash and marketable securities are closely related. The excess amount of cash held to meet its variable cash requirements and future contingencies by an enterprise should be invested temporarily in marketable securities, which can be considered as near money.

One of the characteristic features of this modern age is that, it has become a practice of the business enterprises to avoid too much redundant cash by investing a portion of their earning in assets which can be easily converted into cash. Such assets may consist of government securities, bonds, debentures and shares that are readily marketable and can be liquidated when cash is needed.

4.6 FACTORS AFFECTING WORKING CAPITAL REQUIREMENTS

No specific formula determines the working capital requirements of a company. It is determined by a host of factors having varying degrees of importance. However, the following factors are pertinent for having an overall view of the forces affecting working capital needs.

1. Nature and Size of Business

The working capital requirements of a company are basically influenced by the nature of the business.⁽⁶⁸⁾ Trading and financial companies have a very small investment in fixed assets and require large amount of money to be invested in working capital and lesser amount in fixed assets. The working capital in a manufacturing concern is required for purchasing material inputs, maintaining inventory, financing of receivables, and meeting expenses related to marketing of products, to pay salary and wages. Trading concerns have to invest proportionately high amount in current assets as they have to carry stock in trade, accounts receivable and liquid cash. The size of a business also has a significant impact on its working capital needs. The size can be measured in terms of the scale of operations. A company with a larger scale of operations will need more working capital compared to one with a smaller scale of operations.

2. Working Capital Cycle

An extended time span between the purchase of raw materials and the completion of the manufacturing process yielding the finished product means a larger tie-up of funds in the form of increased working capital requirements.

The working capital cycle consists of and is influenced by three distinct interrelated flows ⁽⁶⁹⁾

- i. The physical flow of elements required in the manufacturing process such as raw materials, work-in-process, finished goods, supplies, spare parts and stores.
- ii. The paper work flow related to accounts payable, inventory keeping, accounts receivable and the like.
- iii. The cash flow in or out of the company as determined principally by two key dates - the date of receipt of materials and the date of shipment of finished goods.

The longer the working capital cycle, the larger will be the company's requirements of working capital and vice-versa. An extended working capital cycle means a larger tie-up of funds in inventories.

3. Vagaries in Supply of Raw Materials, and Spare Parts and Stores

Certain raw materials, and spare parts and stores may pose problems in their procurement and holding. The enterprise may be compelled to purchase and maintain large reserves of these items to continue smooth production. This raises the requirements for working capital through the increasing inventory. ⁽⁷⁰⁾

4. Price Level Changes

In the entire world, the problem of changing price levels is increasing frequently. Financial experts are struggling hard to grapple with this problem. Frequent rising of price level demands more funds for maintaining the same level of activity. Generally, the changing level of prices does not move in the same direction, as working inputs varies from company to company depending on the nature of operation and other relevant considerations. Thus, this diversity in price changes creates a contradiction among the companies.

5. Volume of Sales

The volume of sales has an impact on the working capital requirements because of the investment of working capital in costs of operation, inventories and receivables ⁽⁷¹⁾. As the volume of business expands, the requirements for

working capital are greater, although working capital may not increase proportionately with the increase in sales due to the fact that as business expands, there may be more efficient uses of working capital

6. Business Fluctuations

Needs of working capital of a company vary with the business variations. Most companies experience seasonal and cyclical fluctuations in the demand for the products affecting the working capital requirements especially the temporary working capital requirements of the company.⁽⁷²⁾ Under a boom period, sales will increase, correspondingly the company's investment in inventories and book debts will also increase. This will require further addition to working capital. On the other hand, when there is a recession in the economy, sales will fall and consequently the level of inventories, book debts will also fall and requirements of working capital will be minimized.

7. Availability of Credit

The working capital requirements of a company are also affected by the credit terms granted by its creditors. A company having liberal credit flows will need less working capital and vice-versa. Availability of bank credit also influences the working capital needs of the company. A company can operate with less working capital if bank credits are available on easy terms.⁽⁷³⁾

8. Production Policy

A steady production policy will cause inventories to accumulate during the off season period and the company will be exposed to greater inventory costs and risks enhancing working capital requirement.⁽⁷⁴⁾ Accumulation of inventories may create special risks and cost, because of the inherent character of the products. Thus, production policies need to be formulated on the basis of the individual setting of the company and the dimensions of working capital will vary accordingly.

9. Profit Margin and Profit Appropriation

According to Chikminatto, "operate the business at a profit, if this is done, there is little danger of insufficient working capital".⁽⁷⁵⁾ A high net profit

margin contributes towards working capital pool. Net profit is a source of working capital to the extent it has been earned in cash. The cash profit can be found by adjusting the non-cash items such as depreciation, outstanding expenses, accumulated expenses, losses written off, etc., in the net profit. But in practice, the net cash flow from operations can not be considered. The company's policy on retained profits also has an impact on working capital. If the profits are retained in the business, the company's working capital position will be strengthened.

10. The Depreciation Policy

This has an influence on working capital requirements. Depreciation is an indirect way of retaining profits and preserving the company's working capital position ⁽⁷⁶⁾

11. Operating Efficiency

Operating efficiency indicates better utilisation of the resources, which improves profitability. An efficient use of materials, labour and other resources reduces the pressure on working capital requirements.⁽⁷⁷⁾ A company having no control on the operating costs will contribute to further requirements of working capital. Operating losses are the drain of working capital.⁽⁷⁸⁾ It aggravates the working capital requirements leading to further loss.

12. Management Attitude Towards Risk

This refers to the risk of not maintaining sufficient current assets to meet all financial obligations as they mature, as well as to support the proper level of sales. The following principles involving risks may act as the core of policy formulation ⁽⁷⁹⁾

- a) If the amount of working capital is varied relative to fixed capital, the amount of risk also varies and the scope of gain or loss is increased
- b) The type of capital used to finance working capital affects the amount of risk and opportunity for gain or loss.
- c) The greater the disparity between the maturing of the debt and the flow of the debt and the flow of internal fund, the greater the risk and vice-versa

By changing the amount of work, the management can also change the amount of working capital required and thus create the variation in the uses of working capital showing increase and decrease in profits and losses. Using more risky capital, the management can increase the owner's return provided it can determine the company's capacity to repay its obligations

13. Inventory Policy

The most important component of working capital is the inventory. Excessive accumulation of inventory in relation to normal requirements enhances the working capital requirements while shortage of inventory affects the continuity of production and employment. This requires an optimum inventory, i.e., the level when the total inventory cost is minimum and when the carrying cost and the ordering cost of the inventory are equal. Specific inventory policy ensures the optimum level of inventory through better planning and control of inventory.⁽⁸⁰⁾

14. Receivables Policy

The receivables policy has great impact on the volumes of working capital⁽⁸¹⁾ The higher the volume of credit sales and the longer the credit period granted, the greater will be the accumulation of receivables. Payment practice of the customers, credit policy, collection policy, and such aspects are related to the receivables. An excessive accumulation of the receivables increases the working capital and hampers the liquidity position of the concern. Investment in receivables should not be at the cost of the company's net worth and due attention is required in formulating receivables policy.

15. Cash Policy

Cash policy plays a significant role in the working capital requirements of the company. Insufficient cash is harmful for the liquidity of the enterprise, while excessive cash in hand reduces the operational efficiency. So, cash-in-hand is a non-earning assets, it should not exceed some optimum level.⁽⁸²⁾

Besides above factors, several other factors like hazards, contingencies, import policy of the government, means of transport and communication,

taxation, dividend policy, reserve policy, etc., influence the requirements of working capital. A company, facing fluctuation in demand and price for its products or involving changing technology, requires additional working capital to cope with the contingencies. The import policy of the government may also affect the requirements of working capital as the companies are to arrange funds during a specific period of time.⁽⁸³⁾

Transport and communication plays a vital role in the working capital requirements of the company. If the means of transport and communication are not developed, the company has a great demand for working capital to maintain adequate inventory of raw materials and other accessories.⁽⁸⁴⁾ Other factors like absence of coordination in production and distribution policies in a company, absence of specialization in the distribution of goods and other marketing problems enhance the need for working capital.

Thus, the size of working capital should be formulated appraising the managerial attitude towards risk and the operational context of the enterprises. This will make the policy more scientific and will facilitate the identification of the working capital problems in the enterprise. Management has to be alert to the internal, external and environmental development and has to plan and review constantly its working capital needs and strategy.

4.7 FINANCING OF WORKING CAPITAL

The conventional generalization relating to the financing of working capital suggest that an amount equal to the basic minimum of current assets should be financed from long-term sources and that only seasonal requirements of working capital should be financed from short-term sources.⁽⁸⁵⁾ Therefore, any enterprise must find out various sources of funds to finance its working capital. Three types of financing of working capital can be distinguished:

- (a) long-term financing,
- (b) short-term financing, and
- (c) spontaneous financing.

- (a) The important sources of long-term working capital are shares, debentures, public deposits, preference shares, ploughing back of profits (retained earnings), and long-term loans from financial institutions. In the words of Prasanna, "The long-term sources of finance provide support for a small part of current assets requirement which is called the working capital margin".⁽⁸⁶⁾
- (b) On the other hand, short-term financing refers to those sources of short-term credit that the enterprise must arrange in advance and this arrangement of some amount of working capital may be needed to meet the seasonal demands and some special urgent need such as rise in prices, strikes, Flood, etc. This part of working capital gives rise to temporary working capital which can not be permanently employed gainfully in the business enterprise. The main important sources of short term working capital are short term bank loans, commercial papers, factoring receivables and advances, etc. However, according to Jain, "the short term sources of finance, referred to also as current liabilities, providing the major support for current assets, consist of (i) accruals and provisions, (ii) trade credit, (iii) short-term bank finance, and (iv) short-term public deposits".⁽⁸⁷⁾
- (c) Finally, working capital can also be financed by spontaneous financing which refers to the major automatic sources of short-term funds. The sources of such financing are trade credit (creditors and bills payable) and outstanding expenses. Spontaneous sources of finance are cost free, and an enterprise would like to finance its working capital with spontaneous sources as much as possible. So, an enterprise is expected to utilize spontaneous sources to the maximum level. Therefore, the real choice of financing working capital (not financed with spontaneous sources) is between short-term and long-term sources.⁽⁸⁸⁾

There are three important approaches which are applied in practice and play a determining role in the financing of working capital viz , (i) Hedging or matching approach, (ii) Conservative approach, and (iii) Aggressive approach ⁽⁸⁹⁾

(i) Hedging or Matching Approach

In Hedging approach, long-term funds are used to finance fixed assets as well as the permanent portion of current assets while short-term borrowings are used to finance variable portion of current assets. In this approach, the life of asset is matched with the maturity period of the asset. For example, inventory expected to be sold in one month may be financed with a one month bank loan, a five years loan could be raised to finance a plant and machinery with an expected life of five years, and twenty-five year building may be financed by twenty-five debentures and so on. However, it should be noted that exact matching is not possible because of the variation about the expected lives of assets

(ii) Conservative Approach

The financing policy of the company is said to be conservative when it depends more on long-term funds for its financing needs. It relies heavily on long-term financing and therefore, is less risky. When a company adopts the conservative approach, it uses more long term funds for financing fixed assets, the permanent portion of current assets and a part of the portion of variable current assets.

(iii) Aggressive Approach

An aggressive policy is said to be followed by the company when it uses more short-term funds in financing its temporary current assets and also the permanent portion of current assets.

Of the three financing approaches, return on equity is the highest in case of aggressive approach and lowest under the conservative approach. The aggressive approach is the most risky because short-term financing is maximum in this scheme, while short-term financing to total financing is minimum in the conservative approach and it is less risky. In framing the financial policy for working capital, relative assets liquidity and relative financial liquidity need to be judged carefully. The financing of working capital depends on this liquidity structure and risk-taking.

According to Hampton,⁽⁹⁰⁾ a company must have long-term sources for a major portion of its working capital. In absence of long-term financing, the financial manager will spend excessive time managing the liquidity aspects of the current assets rather than focusing on profits from the assets. Benefits of long-term financing are as follows:⁽⁹¹⁾

a) Reduces Risk

Long-term financing eliminates the need to repay loans at frequent intervals. This reduces the danger of repayment.

b) Provides Stability

If assets are financed so that they will be available for a long period of time, they provide a certain stability to the company operations. The company need not worry about purchases for production because of the available cash.

c) Increases Liquidity

The company can tie-up the long-term funds in working capital and thus increases the liquidity and contribute to the profitability of the company.

4.8 ANALYSIS OF WORKING CAPITAL

Various methods and techniques of the analysis of working capital, viz , inventory and its components, receivables and its components, loans and advance and its components, cash and bank balances and working capital finance balances have been discussed in the chapter on methodology.

4.9 CONTROL OF WORKING CAPITAL

Maintaining the working capital is essential for a company to succeed. A company should maintain the working capital level consistent with the requirement of the company by exercising effective control on various components of working capital and regularly analysing changes in net working capital.

The control of working capital is the sum total of the control of the various stages of the working capital cycle like the following:⁽⁹²⁾

- i. Raw materials storage stage.
- ii. Stage of work-in-process.
- iii. Stage of finished goods.
- iv. Sales and collection stage

Funds locked up during this production marketing cycle are called working capital. The control of working capital includes four basic steps covering the entire operating cycle. The steps are as follows:⁽⁹³⁾

- i Establishment of standard.
- ii Appraisal of performance.
- iii. Corrective action to be taken on the deviation from the standard
- iv. Follow-up action to ensure that corrective action is effective.

According to Venugopalan,⁽⁹⁴⁾ control of working capital can be maintained by the introduction of a system of scientific budgeting based on well-defined policies of the organisation, and flow time chart of the production operation. The budget and standards are built up in physical terms for each of the components of the working capital. The actual position in physical terms and time taken in each of the components of the working capital cycle are collected and compared with the budget. In this way, through periodic comparisons, preferably monthly, between the budgets and the actuals, the adverse deviations are spot-lighted and timely action is taken by the executives of the concern.

To plan and achieve the physical targets laid down by the management for better control of working capital, the following factors are of immense help

a. Sales Policy

From the control point of view, the sales policy is expressed in the form of the annual budget both in respect of the physical and the time factors, taking into account all the factors past, present and future. Actual sales are compared with the budgeted sales. Variances, if any, are analysed by causes and responsibilities so that timely action can be taken to correct the adverse deviation from the budget.

b. Purchase Policy

Similar to sales policy, purchase policy is expressed in the form of realistic budget, broken into periods by considering all other factors. Actuals purchase are compared with the budget for each period, variances are analysed and corrective action can be taken well in time.

c. Credit Policy

Control of working capital depends largely on the credit policies followed both in respect of suppliers and customers. The time factor is planned by means of the budget, both in respect of granting and availing of credit facilities so that the actual credit can be compared and deviation from the planned policy can be spotlighted and corrective action can be taken.

d. Stocks Level Policy

Inventories are generally described as the grave-yard of business failures. Proper control of inventory reduces the excessive requirements for working capital, thus strengthening the working capital base.

e. Production Time

The longer the production time, the greater the working capital requirement. Control of production time ensures rapid turnover of work-in-process and reduces the working capital needs.

Better control of working capital depends on the control of inventory, receivables and cash, let us examine these aspects in some more details.

CONTROL OF INVENTORY

Inventory control means the control of the physical goods owned by the company and the amount of funds which are invested in inventories of each type. Controlling of inventory is simply seeing that the end result of inventory planning coincide with the predetermined inventory objectives. This requires that each step in inventory process be checked with standards which have been established and corrective action must be taken on the deviation from the standard⁽⁹⁵⁾ Uncontrolled inventory is industry's cancer. Paucity of working

capital enhances the necessity of inventory control to a great extent.⁽⁹⁶⁾ In a scientific system of inventory control, the following levels and quantities are fixed for each class of items.⁽⁹⁷⁾

- (a) **The Minimum Level:** It refers to that level below which available inventory should not come down. The exact quantity is determined by normal procurement time, rate of consumption, importance in the process, etc.
- (b) **Reorder Point:** The reorder point is the quantity level at which order for replenishment should be made to have fresh supplies in time. It includes the average volume of use during the normal procurement time and additional quantity or the safety stock.
- (c) **The Economic Order Quantity:** The economic order quantity is an important technique in the purchase of raw materials, storage of finished goods and in transit inventories.⁽⁹⁸⁾ It is determined through the analysis of ordering costs and carrying costs. Economic order quantity is that size of quantity of materials to be ordered where ordering cost and carrying cost both are equal or total cost is minimum.
- (d) **Safety Stock Level:** The amount of demand for inventory can not be known with certainty. It fluctuates from time to time. Owing to this fluctuation, it is not feasible in most cases to allow expected inventory to fall to zero before a new order is expected to be received. Most companies maintain a margin of safety or safety stock to meet the customers' demand.
- (e) **Order Point Formula:** Determination of safety stock involves balancing the cost of stock out with the cost of carrying additional inventory. The optimal order point is the level of inventory at which an order of the economic order quantity of additional stock is made.⁽⁹⁹⁾ It includes a safety stock which is determined by the stock out acceptance percentage. Total cost are affected by both the order point and order quantity and the optimal control system must include both of these factors.

CONTROL OF RECEIVABLES

The control of receivables has a significant impact on the effectiveness of credit and collection policy and the control of working capital. Complete information regarding the performance of each control technique or procedure is absolutely essential. The various ways of controlling the receivables are as follows:⁽¹⁰⁰⁾

- i) **Receivables Turnover:** The rate at which receivables turnover, is a significant indicator of the effectiveness of a company's credit and collection policy. If the turnover is not satisfactory in comparison to other companies in the same industry, it indicates that there is a problem in credit policy or in collection policy. The turnover of accounts receivable is probably a crude measure to provide effective control.⁽¹⁰¹⁾ A more refined control device is the ageing of accounts receivable. With the use of computers, accounts receivable can be aged monthly and tabulation of past due accounts can be made.⁽¹⁰²⁾
- ii) **Percentage of Collection Reports:** The percentage of collection figures is helpful in evaluating the efforts of the credit department. It may be compared with the previous collection percentage figures. If the trend is downward, corrective action may be taken. Many companies regard it as a means of controlling credit and collection policies.
- iii) **Report of Ageing Accounts Receivable:** The report of the ageing accounts receivable classifies each account according to the length of time it has been due, i e., 30 days, 60 days, overdue, etc.⁽¹⁰³⁾ This reveals the effectiveness of credit and collection policies, measures the efficiency of the credit department and acts as a basis for bad debt reserve and profit and loss adjustment. The ageing schedule provides only an indirect means of judging collection experience. A more direct procedure is to calculate a distribution of collections by the age of the account at the time of collection.⁽¹⁰⁴⁾

- iv) **Report of Bad Debts:** Normally bad debts should not exceed a certain percentage of sales. Report of bad debts shows the amount of bad debts and if this is found to be greater when compared with the expected standard, corrective action is easily taken
- v) **Report of Delinquent Accounts Receivable:** Report of delinquent accounts receivable shows the volume of delinquent accounts receivable to credit sales. Delinquent accounts receivable are past due amounts which remain uncollected for a long period. Normal delinquency ratio is based on the past experience of the company. If the actual position exceeds the normal, it indicates that the credit and collection policy is lenient.⁽¹⁰⁵⁾

According to Wixon, et al.,⁽¹⁰⁶⁾ control of receivables refers to the application of the following three techniques.

- a) **Granting of Credit:** Credit policies and terms of sales should be proper so as to discourage the incurring of excessive bad debts and to encourage sales to financially sound customers.
- b) **Making Collections:** After the grant of credit, efforts are made to have payment as per the terms of sale and within the stipulated time. The longer the average collection period, the longer would be the working capital cycle and the lesser would be the turnover of receivables.
- c) **Installation and Maintenance of Internal Control:** Efficient granting of credit and efficient collection do not ensure the control of receivables unless there is proper internal control. All shipments should be invoiced properly and payments are to be directed into the bank account.

CONTROL OF CASH

Cash is a liquid asset which is of great importance for the daily operations of business companies. The effective control of cash is one of the most important requirements of successful financial management. Cash is the life-blood of a business enterprise and its steady and healthy circulation throughout the entire business operation is the basis of business solvency⁽¹⁰⁷⁾

One of the major objectives of cash management from the standpoint of increasing return on investment is to economise the cash-holding without impairing the overall liquidity requirements of the companies.⁽¹⁰⁸⁾ This is possible through a sound system of internal control and control over cash-flows. Before the control of cash, it is necessary to establish the desired goals and policies in advance. Control points are made at strategic points to find out the accomplishment of the specific objectives. The preparation of cash budget is a tool to plan cash needs after budget preparation, which may serve as a control device. A cash budget is a summary statement of the company's expected cash inflows and outflows over a projected time period.⁽¹⁰⁹⁾ The cash budget indicates the amount of funds that will be needed month by month or even week by week. It also serves as an important tool of financial control. The cash budget compares the estimated cash income with the estimated cash disbursements of the company over the budget period and reveals the monthly cash position. For proper control, the budget period is divided into shorter periods, known as control periods. Deviations from estimates are carefully noted and proper action is taken well in time

The control of cash depends on the four facets of cash management.⁽¹¹⁰⁾

1. **Cash Planning** Cash inflow and outflow should be planned to determine cash surplus or deficit for each period of the planning
2. **Managing the Cash Flows.** The inflow and outflow of cash should be properly managed
3. **Optimum Cash Level:** The company should determine the appropriate level of cash balances. The cost of excess cash and the danger of shortage in cash should be taken into account while determining the level of cash balances.
4. **Investing Idle Cash:** The idle cash balances should be invested for earning profits, either as bank deposits or in marketable securities

A detailed account of the analysis of collected data with their respective interpretation are presented in the following chapter.

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