

FINANCIAL MANAGEMENT

Meaning of Financial Management

Financial management is rightly treated as the most pivotal functional area of total business management. It concerned with the financial aspect of business and is defined as the planning, organizing, directing and controlling of the financial resources of a firm. It is one of the sub systems of the business enterprise and is closely connected with other sub systems like production, marketing, personnel and so on. Financial management has to evolve policies and procedures and use a variety of analytical tools in the analysis, planning and control of the enterprise involving funds.

Definitions of Financial Management

"Financial management is an area of financial decision making harmonizing individual motives and enterprise goal." Weston and Brigham

"financial management is the operational activity of business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operation." Joseph and Massie

Scope of Financial Management

The approach to the function and scope of financial management is classified into two categories.

- a) Traditional approach
- b) Modern approach

The two approaches followed one another chronologically, reflecting how the scope of financial management has changed over the years from preparation of reports and raising of external funds to the strategic management of assets, allocation of capital to different projects and valuation of the firm in the overall market.

- a) Traditional approach

According to this approach the finance function is restricted to procurement of funds by corporate enterprise to meet their financing need. Thus, the traditional approach to financial management revolves around how resources could best be raised from the combination of the available sources.

The traditional approach has many limitations.

- 1) This approach is confined to procurement of funds only. It fails to consider an important aspect i.e. allocation of funds. The approach was mainly descriptive and institutional. The institutions involved, capital markets procedures and the legal aspects of financial events formed the core of Financial Management.
- 2) The focus was mainly on certain episodic events like formation, issuance of capital, major expansions, merger, reorganization and liquidation in the life cycle of the firm.
- 3) The outsider's point of view was dominant. Financial management was viewed mainly from the point of view of outsiders i.e. investors, investment bankers, etc.
- 4) Traditional approach fails to consider the problems involved in working capital management.
- b) Modern approach

In this approach that began in the mid-nineteen fifties, the scope of financial management has broadened, the approach has become more analytical and quantitative and the point of view of the managerial decision has become more dominant. According to this approach, apart from the issues involved in acquiring external funds, the main concern of financial management is the efficient and wise allocation of the same. These issues in turn require a defensible basis to answer the following questions.

- 1) What specific assets should a company acquire?
- 2) What total volume of funds should a company commit?
- 3) How should the funds acquired be raised?

Another way of stating these questions is as under

- 1) How large and fast should a company grow?
- 2) In what specific forms should it hold its assets?
- 3) What should be the composition of its liabilities?

Financial management, in the modern sense of the term, can be broken down into three major decisions as function of financial resource. It involves three major decisions.

- a) The investment decision
- b) The financing decision and
- c) The dividend decision

Which reflect the responsibilities of acquiring financial resources and managing those resources.

(f)

a) Investment decisions.

Investment decisions relate to the careful selection of the composition of assets and the viable and profitable investment proposals in which funds will be invested by a firm with to maximize its value. The assets fall into two broad groups (a) long term assets (b) short term or current assets. Financial investment decision relating to the former are popularly known in financial literature as capital budgeting while those relating to short term assets are popularly called working capital management. Capital budgeting decision are most crucial for a firm and involve the decision of allocation of funds to projects, which can range from acquisition of plant and modernizing/ replacement of existing fixed assets to the acquisition of another entity. Investment to enhance internal growth is often called 'internal investment' as compared with acquisitions, which represent 'external investment'.

Investing in long term assets usually carries the need for supporting investment in working capital. Short term survival is prerequisite for long term success and often not properly taken into account by management. If a firm does not invest sufficient funds in current assets, it may become illiquid and consequently may not have the ability to meet current obligations and thus invite the risk of bankruptcy. Management of working capital has two basic ingredients (a) an overview of working capital management as a whole considering issues such as the trade-off between liquidity, risk and profitability and (b) efficient management of the individual current assets such as cash, receivables and inventory.

The other side of the investment coin is disinvestment, which means the preparedness to withdraw from unsuccessful projects, and the disposal of part of an entity which no longer fits with the parent entity's strategy. Such decisions usually involve one very special element the right timing for the action to be taken. Disinvestment decision can also be involved in reconstructions, where an entity has to alter its capital structure, possibly to survive as a result of heavy losses.

b) Financing decisions.

Financing decision related to acquiring the optimum finance to the firm's investment proposals and its working capital requirement. The financial manager must possess good knowledge of sources of available funds, their respective costs, impact of taxation and should ensure that the entity has a sound capital structure i.e. a proper balance between fixed return sources of financing and variable return securities/sources of finance. The use of debt and preference capital implies a higher rate of return to the equity shareholder but also a higher financial risk because of the priority rights of the

lenders. An optimal degree of gearing between the two kinds of capitals must exist to trade-off between risk and return to shareholders.

c) Dividend Decisions.

Dividend decisions relate to the determination of how much and how frequently cash can be paid out of the profits of the entity as income for its proprietors. Owners of profit-making organizations look for reward for their investment in two ways the growth of the capital invested and the cash paid out of income.

The dividend decision thus has two elements (1) the amount to be paid out and (2) the amount to be retained to support the growth of the firm, the latter being also a financing decision. The level and regular growth of dividends represent a significant factor in determining a profit-making company's market value, i.e. the value placed on its shares by the stock market. The final decision will depend on the preference of the shareholder and investment opportunities available within the firm and several other factors that shape the dividend policy including legal and cash flow constraints.

The traditional approach had a very narrow perception and was devoid of an integrated conceptual and analytical framework. It had rightly been discarded in current academic literature in favor of the modern approach which has broadened the scope of financial management which involves three major decisions—investment, financing and dividend.

PRIMARY OBJECTIVE (GOALS) OF FINANCIAL MANAGEMENT

The term objective in this note is used in the sense of goal or *decision* criterion for three decisions involved in financial management. To make wise decisions a clear understanding of the objectives which are sought to be achieved is necessary. The objectives provide a framework for optimum financial decision making. There are two widely discussed alternatives in financial literature. These are 1) profit maximization approach 2) wealth maximization approach.

Profit maximization

Profit provides a yardstick for measuring the economic performance of organizations. It also ensures maximum social welfare. The profit maximization criterion has been criticized on several grounds.

a) Ambiguity.

Financial Planning

Introduction and meaning of Financial Planning

Finance is an important function of business. The application of planning to this function is financial planning and forms an important function for a finance manager. The function is mainly concerned with the economical procurement and profitable use of funds. It involves the determination of objectives, policies and procedures are broad guides in the procurement, administration and disbursement of funds. This function is integral to all businesses- large or small, existing or new. A well prepared financial will not only ensure the procurement of sufficient funds but their proper utilization as well. At the time promoting company such function is undertaken by the promoter and later assigned to the appointed financial manager. A financial plan should be formulated in the light of present needs (fixed assets and working capital requirements) as well as future developments (such as expansion/diversification). Needless to say that financial planning will have a vital bearing on the success of the company.

The three main steps of financial planning are as follows.

- Estimating the amount of capital to be raised to implement the business plans- this involves estimation of the amount of promotion expenses on organization, cost of fixed assets, operating costs and the cost of getting the business established. The promoters will be better advised to take a long term view of the proposed business plan and plan its finances accordingly especially while implementing projects.
- Determining the form and promotion of the securities to be issued depending upon the future profitability- forecasts are made as to what extent the above requirements will be met by internal generation of funds and the extent they will be met from external sources. Corporate securities may be also broadly classified into two types (a) Ownership securities -these are held by those who contribute to the share capital and are called share and each share represent a unit of share capital. The value indicated on a share is called face value or par value. According to companies Act of 1956 two types of share capital may be issued Equity shares and Preference shares (b) Creditorship securities- these are used for raising loans from the investing public and financial institutions and are called debentures or bonds. It must be remembered that the preference share capital and debentures/bonds are fixed yield bearing earning dividends and interest respectively while the equity shares earn are variable yield bearing earning dividends.
- Developing the action plan for the above laying down the policies to be pursued as to the administration and control of plan-this would include
 - 1) Develop the best plans to obtain the required external funds

∴ Establish and maintain a system of financial control governing the allocation and use of funds

1) Formulate programmes to provide the most effective profit-volume-cost relationships

2) Analyze the financial results of operations

3) Report facts to the top management and make recommendations on future operations of the firm

4) Providing for flexibility in the financial plan

For example the decision regarding the opportune time (boom, recession, depression or recovery) of issuing a particular security or developing an alternative course of action if there are uncontrollable deviations from the plan.

What is a Financial Plan

A financial plan is a statement estimating the amount of capital and determining its composition. The quantum of funds needed will depend upon the assets requirements of the business. The time at which funds will be needed should be carefully decided so that finances are raised at a time when these are needed. The next aspect of a financial plan is to determine the pattern of financing. There are a number of ways for raising funds. The selection of various securities should be done carefully. The funds raised by Issuing of capital and debentures, raising of loans, etc. which source of finances should be raised and upto what amount these should be raised is very important financial plan also spell out of policies to be pursued for the floatation of various corporate securities, particularly regarding the time of their floatation.

Objectives of financial plan or characteristics/principles of a sound financial plan.

- 1) Balancing of costs and risks. There should be a balancing of costs and risk as to protect the investors.
- 2) Flexibility. A financial plan should not be rigid and must imbibe flexibility so as to adjust as per the requirements and changing conditions such as fresh opportunities arising or idle funds being invested in short term low risk bearing securities. This will be helpful in coping with the demand of the future.
- 3) Simplicity. The financial structure should not be complicated by issuing a variety of securities. The number of securities should be less so that it is easily understood.
- 4) Long term view. A financial plan should take long term view. The need for funds in the near future and over a longer period should be considered while selecting the pattern of financing.
- 5) Solvency and liquidity. A financial plan should must ensure that short term and long term commitments be made as and when they arise. This will ensure credit worthiness and

It is amenable to different interpretation. For instance profit may be profit after tax or return on investment or return on equity. If profit maximization is considered as the main objective, then which of the variants of profit is to be maximized? So profit cannot be the criterion for financial management decision.

c) Timing of benefits

The profit maximization objective does not take into account the timing of benefit (cash flow) for example.

CASH FLOWS

Year	Proposal X (Rs.)	Proposal Y (Rs.)
1	1,00,000	8,00,000
2	2,00,000	2,00,000
3	7,00,000	-
Total	10,00,000	10,00,000

As per the above table, if profit maximization is the objective the two proposals above are of equal importance. But there is difference in the timely pattern of benefits received from the two proposals. Proposal Y gives higher returns in the earlier years, while proposal X provides large returns in the later years. The returns received earlier are more valuable because it can be reinvested so as to generate additional return. Therefore proposal Y is better than proposal X even though both the proposals give the same gross benefits (cash flows).

d) Quality of benefits

The term quality refers to the degree of certainty with which returns are expected. A more certain and uniform return means the higher quality of benefits. On the contrary an uncertain fluctuating return means lower quality of benefits.

CASH FLOWS

Years	Proposa X (Rs.)	Proposal Y (Rs.)
1	-	5,00,000
2	10,00,000	3,00,000
3	-	2,00,000
Total	10,00,000	10,00,000

If the profit maximization objective is taken as the criterion both the projects would be ranked as equally important. The returns from proposal X are uncertain and fluctuating and so the quality of benefit is low. In proposal Y the variation is negligible and hence

the quality of benefit is high and therefore the project Y should be given a higher ranking.

Wealth Maximization

Wealth maximization is also known as value maximization or present worth maximization. As against profit maximization, this it is now accepted that the business should be wealth maximization. In the case of a company form of organization the owner/shareholder's wealth is maximized only when the market value of the share is maximized. The maximization of wealth is only possible by making decision based on the standpoint that the value of an asset or the worth of a course of action should be seen and measured in term of the benefit it can produce less the cost of undertaking/acquiring it. A firm that aims at maximizing the market value of its equity will raise capital only when its investments warrant the use of capital from the overall point of view of the economy. This suggests that it all allocates resources optimally. If a firm does not pursue the goal of shareholder wealth maximization, it implies that its actions result in a suboptimal allocation of resources which in turn leads to inadequate capital formation and lower rate of economic growth.

Due to the limitation attached to profit maximization, as the objective of the function of financial management, it is no more accepted as the basic objective. The goal of wealth maximization is supposed to be the goal of profit maximization on account of the fact that, its satisfaction fulfills three requirements of a suitable criterion, viz

1. Precision (exactness)

> Acknowledgement of time value of money and

> Quality of benefits.

a) In wealth maximization criterion, the benefits associated with the assets are measured in term of cash flows rather than accounting profit. Cash flow is precise concept with definite meaning. It overcomes the deficiencies associated with accounting profit.

b) It considers time value of money. It recognizes that the cash flow generated earlier is more valuable than generated later. That why while value of total benefits the cash flows are discounted at a particular discount rate. A financial action which has a negative net present value should be rejected and vice versa.

c) It also recognizes the concept of risk, by making necessary adjustments in discounting rate. As such cash flow of a project involving higher risk are discounted at a higher rate and vice versa. Thus the discount rate used to discount future cash flows reflects the concept of both time and risk.

goodwill of the concern. During period of depression it is the liquidity position of the firm that can keep it going.

- 6) Optimum use. A financial plan must ensure sufficient funds for genuine needs (adequate funds to achieve enterprise goals). Neither should plans suffer due to shortage of funds nor wasteful use of them. Funds should be put to their optimum use.
- 7) Economy (which contributes to profitability). The cost of raising funds should be minimum and should not impose disproportionate burden on the company. It can be ensured by a proper debt-equity mix. A good plan should adjust various securities and have a proper debt-equity mix so that profitability of the enterprise is not adversely affected.
- 8) Less depended on outside sources. Should reduce reliance on outside sources by retaining a part of the profits for ploughing back. In the initial years a company outside funds will be a necessity but over the years the dependence on these funds should be reduced. As and when possible, interest bearing securities should be returned so that this burden is reduced.
 - Based on clear cut objectives. Financial planning must keep in mind the overall objectives of the company and should aim procure funds at the lowest cost so that profitability of the business is improved.

Limitations of financial planning.

- Difficulty in forecasting since the future is uncertain and things may not happen as expected, Makes the reliability of financial planning dubious.
- Difficult in changing the plan once prepared, implemented and committed.
- Problem of co-ordination several functions like production policy, personnel requirements and marketing possibilities influence the preparation of the plan be successful which is in itself a difficult task.
- Rapid changes with the passage of time like growing mechanization, methods of production, marketing devices, consumer preference necessitate a change in the financial plan, It becomes very difficult to adjust a financial plan to the changing situations.

Introduction and meaning of capitalization,

In common parlance the term capitalization means the total amount of capital employed in a company. The term capitalization is derived from the term capital, but the two terms are definitely not synonymous. It should be noted that the term capitalization is used only in respect of companies and corporations and not in relation to sole proprietorships and partnerships. On the other hand the term capital is used in relation to all forms of business organizations. On the other hand the term capital is used in relation to all forms of business organizations. Capitalization is a concept of valuation in which the emphasis is laid on the amount of capital (of a company). However, scholars of financial management are not

unanimous regarding the concept of capitalizations. As a matter of fact one finds as many definitions of the term as there are writers on the subject. Some have given a very broad interpretation to the term while others have taken a narrow view.

Broad interpretation: According to this interpretation, the term capitalization is synonymous with financial planning. Thus, in the broad sense, therefore, capitalization refers to the process of determining the quantum as well as patterns of financing and the administration of the financial plan, i.e. it is concerned not merely with the determination of quantity (amount) of finance required for a company but also the decision about the quality (type of security) of financing.

Narrow interpretation: In its narrow sense, the term capitalization refers to the process of determining quantum of long term funds that an enterprise would require to run its business. In other words it is concerned with the computation, appraisal and estimation of the present value of capital in a company. Decisions regarding make-up of capitalization are manifested in the term capital structure. Most of the traditional authors conceptualize the term in this sense. The interpretation is more popular and more specific though restricted. It is in this sense that the term will be used, defined and studied in this topic.

In business the term capitalization refers to either of the following views.

- i. the sum of the par value of the stocks and bonds outstanding at a given time. According to this definition capitalization does not include free Reserves and Surplus, which are in actual practice resorted to by firms to meet their long-term capital requirements.
- ii. the total par value of securities at a given time plus valuation of all other long term obligations.

Basis of Capitalization

After estimating the financial requirements of a business, the promoters of the company have to determine the value at which the company has to be capitalized. This will help them in determining the quantum of securities to be issued for raising the necessary funds. The two recognized theories of capitalization for companies are given below

Cost Theory

According to this theory, the firm's capitalization is based on the costs incurred to establish the company. The amount of capitalization of a new company is arrived at by adding up cost of fixed assets (such as plant, machinery, building etc.), the amount of working capital and the cost of establishing the business (preliminary expenses, underwriting commission, expense on issue of shares etc.). This method of calculating the value of a company is quite easy as the

market value of the assets can be easily assessed and so also the amount of working capital required and the funds spent/will be spent on the establishment and promotion of a firm.

For example if the fixed assets of a company would cost Rs. 1,00,000 working capital required amounts to Rs 50,000 and the cost of establishing the business is estimated at Rs. 20,000, the amount of capitalization for the business would be Rs 1,70,000 and the company would sell securities (shares and debentures) of this amount.

Merits of Cost Theory

- i. Useful for preparing capital plan and suggesting financial needs: The cost theory of capitalization is useful for preparing the capital plan of a new company as it provides a better basis for capitalization. A newly formed company can depend on this theory for calculating the amount of capitalization.

Simplicity and ease: The cost theory is a simple theory which enables the promoters to decide the amount of capitalization in a concrete manner. The calculation of the amount of capitalization is also easy, simple & quick as the market value of fixed and other assets can be easily prepared easily with such data.

Limitations of Cost Theory

- 1) Inadequate attention to earning capacity: The basic objection to the cost theory of capitalization is that the amount of capitalization does not change with changes in earning capacity of the company. The true worth or value of an enterprise is judged from its earning capacity rather than from the capital invested in it. A company with huge investment on various assets need not be treated as a promising company. On the other hand, its assets may remain idle or may go down and it may become a loss making company even when the amount of capitalization is substantial. Therefore, this theory may not be suitable for existing and running companies.
- 2) Do not suggest real worth: It fails to provide basis for ascertaining the worth of the business in real terms since worth depends not on the cost of assets but on its earning capacity. Moreover, it does not take into account the future needs of the business.
- 3) Cost based capitalization will not be fair in case of companies having irregular earnings
- 4) May be inaccurate: The assets might have been purchased at inflated prices or might have become obsolete but these aspects are ignored if capitalization is determined on the basis of original cost of the assets

Cost theory is useful in so far as it enables the promoters to know the amount of capital to be raised. The above theory of capitalization can also be used in the case of established companies. Using the cost theory approach in the case of established companies, may not

disclose the fair worth of the business, on account of the reasons explained earlier. The cost theory is useful for preparing the capital plan of a new company where the future earning capacity is difficult to project accurately.

Earning Theory

According to this theory, the true value of an enterprise is reflected in its earning capacity. In other words the worth of a company is not measured by the capital raised but by the earnings made out of the productive harnessing (usage) of the capital. For this purpose a new company will have to estimate the average annual future earnings and the normal earning rate (termed as capitalization rate) prevalent in the same industry. The amount of capitalization of the company will be achieved by capitalizing the annual future earning at the normal rate of return (In simpler terms the value achieved by dividing the annual projected future earnings by the normal rate of return).

For example, if a company estimates its average annual earnings as Rs 50,000 and companies in the same industry are earning 10% on their capital employed the amount of capitalization would be Rs. 5,00,000 (i.e. $50,000 \div 10\%$)

Merits of Earning Theory

- 1) Convenient to going concern: The earnings theory of capitalization is convenient in the case of an established going concern as the same can be estimated & compared with the earnings of other companies.
- 2) Provides logical base: The theory gives a logical base for capitalization.
- 3) Superior to cost theory: The earnings theory has an edge over the cost theory as it links the value/worth of a company directly with its earning capacity.

Limitations of Earnings Theory

- 1) Computation of future earnings (and hence capitalization) is difficult: It is difficult to estimate correctly the amount of future earnings. In case the earnings are not correctly estimated, the capitalization based on earnings would prove to be incorrect and risky for the company. Capitalization is based on a 'rate' by which earnings are capitalized. However this rate cannot be determined easily as it is dependent on many factors such as nature of industry, financial risks, market competition, government policies & business environment in general.
- 2) Not applicable to new companies: The earnings theory is too risky to be applied in the case of new companies as future earnings cannot be estimated with accuracy & capitalization based on such estimated earnings may not be fair or accurate. Hence it is inadvisable to adopt the cost theory of capitalization in case of new companies

- J> Typical contents of a lease agreement
- J> Income tax provisions related to leasing
- J> Sales tax provisions related to leasing
- >:- Procedural aspects of leasing
- J> Accounting treatment of leases

Legal Aspects of Leasing

There is no separate statute for equipment leasing in India, and the provisions relating to bailments in the Indian Contract Act cover equipment leasing agreements as well. Section 148 of the Indian Contract Act defines bailment as 'The delivery of goods by one person to another, for some purpose, upon a contract that they shall, when the purpose is accomplished, be returned or otherwise disposed of according to the directions of the person delivering them.' The person delivering the goods is called the bailor, and the person to whom they are delivered is called the bailee.

Since an equipment lease transaction is regarded as a contract of bailment, the obligations of the lessor and the lessee are similar to those of the bailor and the bailee as defined by the provisions of the Indian Contract Act. Essentially, these provisions have the following implications for the lessor and the lessee:

- 1) The lessee has the duty to pay the lease rentals, as specified in the lease agreement, to protect the lessor's title, to take reasonable care of the asset, and to return the leased asset on the expiry of the lease period.
- 2) The lessor is obliged to deliver the asset to the lessee; to legally empower the lessee to use the asset, and to leave the asset in possession of the lessee during the currency of the agreement without any disturbance.

Contents of a Lease Agreement

The lease agreement specifies the legal rights and obligations of the lessor and the lessee. It typically contains terms relating to the following:

- 1) Description of the lessor, the lessee, and the asset
- 2) Amount, time, and place of lease rental payments
- 3) Time and place of equipment delivery
- 4) Lessee's responsibility for maintenance, repairs, registration, etc., and the lessor's right in case of default by the lessee
- 5) Lessee's right to enjoy the benefits of the warranties provided by the equipment manufacturer/supplier
- 6) Insurance to be taken by the lessee on behalf of the lessor
- 7) Option of lease renewal for the lessee
- 8) Return of equipment on expiry of the lease period
- 9) Arbitration procedure in the event of dispute

Income Tax and Income Tax Leasing

The main income tax provisions relating to leasing are as follows:

- 1) The lessor can benefit from depreciation on the investment made in leased assets.
- 2) The lessee can claim lease rentals as tax-deducting expenses. In other words, lease rentals are deducted before calculating income tax.
- 3) The lease rentals received by the lessor are taxable under the head 'profits and gains of business profession' under the Income Tax Act 1961.

Sales Tax Provisions Related to Leasing

The major sales tax provisions for leasing are as follows:

- 1) The lessor does not get the benefit of concessional rate of central sales tax, since the asset is not meant for re-sale nor for use in manufacturing.
- 2) The 46th Amendment Act has brought lease transactions under the purview of sale and has empowered the central and state governments to levy sales tax on these transactions.

While the Central Sales Tax Act is yet to be amended in this respect, several state governments have amended their Sales Tax Act on lease transactions.

Lease Accounting

The accounting treatment of lease transactions in India is as follows:

- 1) Finance leases must be shown as assets in the books of the lessee. This means that (a) at the time of inception, the leased equipment is shown as an asset on the balance sheet of the lessee, its value is equated to the present value of the committed lease rentals, and the leased asset is associated with a corresponding liability called 'lease payable', (b) lease payments are split into two parts—finance charges and principal amount—and the finance charge is treated as an expense on the income statement and the principal amount is deducted from the liability 'lease payable', and (c) the leased asset is depreciated in the books of the lessee as per the depreciation policy followed.

Operating leases are a part of capital in the books of the lessor. While lease payments are treated as income of the lessor and expense of the lessee, the depreciation of leased assets should be on a basis consistent with the normal depreciation policy of the lessor for similar assets.

Franchising

Introduction

Hotel companies expand their scope of operations by building additional properties. Recall from Chapter 16 that the principal source of financing such expansion programmes is either issue of equity shares or additional borrowings. Since 1950s one more method came into existence known as franchising. This method is so popular that most of the well-known hotel and restaurant chains have made extensive and successful use of the franchising model of

The above theory of capitalization can also be used in the case of established companies. Since, in case of established companies it is relatively easier to estimate the stream of future earnings (earning capacity), the earnings approach, in such cases, would be a more appropriate basis for determining their capitalization.

leasing

introduction

A lease is an arrangement where the lessor grants the lessee the right to use an asset in return for periodical rents. While leasing of land and buildings has been known from times immemorial, the leasing of hotel equipments is a recent phenomenon.

A hire-purchase is the purchase of an asset on the understanding that the hirer (called the hirer) will pay in equal periodic installments, spread over a period of time. In essence, a hire-purchase represents debt financing in a different scenario.

Leasing and hire-purchase are additional sources of intermediate long-term finance. They are provided mainly by non-banking financial companies, financial institutions, and other organizations.

With the advent of mixed-use formats, hotels can now benefit by leasing additional space to retail agencies and can earn some additional revenue.

This chapter discusses various aspects of leasing, hire purchase, and project finance.

The following aspects are covered in this chapter:

- Types of lease arrangements
- Mechanics of leasing
- Other considerations in leasing
- Hire-purchase arrangement

Types of Lease Arrangements

The following are the different types of lease arrangements:

- Operating leases
- Financial leases
- Sale and leaseback
- Leveraged lease

Operating lease

An operating lease or service lease has following features:

- 1) The lease period in a short-term lease is less than the useful life of the asset.

- 2) The lease rentals payable during the lease period are not adequate to cover fully the cost of the asset along with an acceptable return thereon.
- 3) The lease can usually be terminated at a short notice.
- 4) The lessor bears the cost for maintenance, insurance, and other incidental expenses.

Businesses interested in leasing their own products enter into operating leases. Tea and coffee vending machines are examples of very commonly leased assets under operating lease arrangements. Though popular overseas, operating leases are not common in India.

Financial Leases

A financial lease or capital lease is essentially a form of borrowing. The salient characteristics of a financial lease are

- 1) It is an intermediate-term to a long-term arrangement that cannot be terminated. During the initial period, referred to as the primary lease period, which is usually 3 years or 5 years or 8 years, the lease cannot be terminated.
- 2) The lessee is responsible for maintenance, insurance, and the incidental costs.
- 3) During this period, the lessor recovers, through the lease rentals, his investment in the equipment along with an acceptable rate of return.
- 4) The lessee has the option of renewing the lease rentals.

Sale and Leaseback

This is a special financial arrangement by which a firm sells an asset to another firm and, simultaneously, the two firms enter into a financial lease by which firm B leases the asset to firm A. As a result, the seller receives the purchase consideration for the asset and also retains the use of the asset in return for periodic lease payments. This avoids heavy outflow of cash initially.

leveraged lease

Under a leveraged lease arrangement, the lessor borrows a portion of the purchase price of the asset from a lender (a commercial bank or a financial institution). The loan is secured against the asset and the lease payment. The lender is paid back from the lease payments, often directly by the lessee, while the surplus, after settling the claims of the lender, goes to the lessor. As an owner of the asset, the lessor is entitled to tax shelters associated with the ownership.

Leases in India are typically financial leases. Hence, subsequent discussion will focus on the aspects of financial leases.

Mechanics of Leasing

As a hotel manager evaluating the possibility of leasing, you should be familiar with the following:

Legal aspects of leasing

Expansion. The world of franchising is growing exponentially every day. Most of us may not even realize that the businesses we support every day are part of a system of franchises. For example, in the morning you might pick up your daily coffee at a local Starbucks. For lunch you may choose to enjoy a sandwich or salad from McDonalds. On the way home from work, you drop off at a multiplex for a recent blockbuster, and for dinner you pick up a piping hot pizza from Pizza Hut. All of these businesses are a part of the franchisee system. We shall try and understand the basics of the franchising arrangement in this chapter.

While it is difficult to pinpoint the exact origin of the business of franchising, it is clear that this business model can trace its existence post-World War II.

Franchising is a business model that incorporates all the aspects of business-finance, management, and marketing. In this model the franchisee arranges for the cost of the franchised property that will be put to use in distributing the franchisor's products. The management or the expertise is provided by the franchisor. The franchisor also provides the right to market products and/or services for a definite period of time as per mutually agreed terms. It is clear that there are two parties-the franchisor (one who owns the concept, e.g., McDonalds) and the franchisee (one who purchases the right to sell the concept). This business model has the advantage of higher levels of profitability combined with lower risk and therefore has been very popular for the reason that it enables individuals to have more profitable business.

Types of Franchises

Franchises may be classified according to the control exercised by the franchisor and also on the basis of the franchisee's right to expand business operations; Let us take a look at the different types of franchises.

- > Product franchises: These are the most prevalent with respect to sales units and numbers. The main purpose is to deliver a product to the ultimate consumer in various locations. Most of the soft drink companies provide franchises for bottling beverages as per geographic locations.
- > Format franchises: This is a common format followed by the commercial food service and lodging operations. The franchisor provides all the business requirements such as the brand, methods, and standards along with organizational and technical skills required to maintain efficient business operations. The franchisor exerts tremendous control over the franchisee to ensure uniformity in all the outlets.
- > Other types: The other classification of franchise on the basis of ability to expand operation is single franchise where the franchisee is with a single location. Many hotels and restaurant companies have the history of extending single franchise. On the other hand, multi-unit franchise is an outcome of the franchisor granting a territory for development. Master franchise is another arrangement where the franchisor provides a legal right to offer subfranchise. In other words, the franchisee can further appoint franchisees.

BENEFITS TO THE FRANCHISEE

The franchisor receives royalty and in return he provides the right to market products and services under a prescribed business format for a predetermined period to the franchisee. The other benefits of franchising can be enumerated as follows:

- 1) Potentially viable business proposition: In most cases the business model is perfected by the franchisor in terms of the profitability and other operational parameters. The risk of failure in such cases in such a business is far lower as compared to new business venture.
- 2) Operational assistance: The franchisee gets a complete set of operational systems including recipes, production systems, etc. Since the operational process and procedures are well defined, the franchisee receives the benefit of all the business.
- 3) Financing assistance: Certain franchisors directly provide financial assistance to the franchisees. In all other cases, the name of the franchisor acts as a guarantee and influences banks and other financial institutions to lend financial assistance to the franchisee.
- 4) Training and development: The franchisee is also trained by the franchisor before the commencement of business operations. Franchisors provide intensive pre-franchise training to ensure that the franchisee understands the systems provided by the franchisor to deliver the required standards of product or service. Some franchisors also provide follow-up and continuous training and development to the franchisees to ensure the highest level of guest satisfaction.
- 5) Market research: Most franchisors carry out extensive market research with respect to various aspects of the business. The franchisees can benefit from this research and do not need to carry out the exercise of market research.
- 6) Demarcated territory: The franchisee often gets an area or territory to operate his business. The size of the area depends on the concept and the market. This also ensures that there is no undue competition.

Advantages and Disadvantages to Franchisors

The first advantage to the franchisor is the franchise fees received from the franchisees. The second is that the business can grow more quickly, as the franchisor does not have to invest his resources directly in the expansion of the project. There are no mundane operational issues and the franchisor can concentrate on higher goals.

The disadvantage to franchisors is loss of control. As the business operations expands, it becomes exceedingly difficult for the franchisors to monitor the quality of the products and services sold by their franchisees. Given this drawback, we do find that some hotel operations have grown at record pace while others have refrained from the franchising approach to expansion. The other disadvantage to the franchisor is the loss in terms of operating income. The franchisee pays only the franchise fees, while the business has the potential to earn much more. Finally, there is always a chance of discord between the franchisor and the franchisee that could upset business relationship and future earning potential for both the parties.

CAPITAL BUDGETING

Capital budgeting refers to the process of evaluating the investment opportunities. If process involves the capital investment design. Capital budgeting considers both capital outlets, as well as finance.

Capital budgeting describes the formal planning process for the acquisitions and investment of capital.

Methods of capital budgeting.

- ❖ Payback period and payback profitability.
- ❖ N.P.V. (net present value) method.
- ❖ A.R.R. (accounting rate of return / average rate of return)
- ❖ I.R.R. (intrnal rate of return)

Payback period.

Payback period is length of time of a Project to recover its initial outlets. e.g. if a project cost Rs.10,00,000 , its bring in cash inflows of Rs.5,00,000 per year. It has payback period of 2 years. If it bring cash inflows of Rs.2,50,000 each year payback period is 4 years.

For calculating payback period we should calculate CFAT (cash flow after tax)

CFAT is calculate like following

Net profit before depreciation and tax	***
(-) depreciation	***
Net profit before tax	***
(-) income tax	***
Net profit after tax	***
(+) depreciation	***
CFAT (cash flow after tax)	***

When CFAT is uniform for all years, we should use the following formula.

$$\text{Pay back period} = \frac{\text{outflow)initial investmwent (cash}}{\text{Annual CFAT}}$$

Q : 1) Total cost of computer including all charges Rs.1,00,000. The net profit after providing depreciation (12.5% P.A.) for machine is expected to be 15,000 per year. The net profit subject to income tax at 50% . calculate the pay back period.

Q :2) Director of company is considering following investment in project A, cost of project is Rs.1,00,000. Following is net profit before tax.

Years	Net profit before tax
01	60,000
02	60,000
03	60,000
04	60,000
05	60,000

Estimated life of a project is 5 years and salvage value is Rs.20,000. Company charge tax @50%. Calculate payback period.

When CFAT is fluctuating.

Q : 3) a company purchase machine for Rs.20,000 and charged depreciation at 20% and Tax at 40% of profit. You are requested to calculate payback period with following Information.

years	net profit before depreciation and tax
1	7,500
2	5,500
3	8,000
4	7,500
5	6,000

Q : 4) New India limited has to choose which of the following project to undertake. Particulars of projects are following.

particular	project -A	project --B
Initial investment	1,50,000	1,00,000
CFAT = 1	30,000	40,000
2	35,000	40,000
3	40,000	40,000
4	50,000	40,000
5	20,000	40,000
6	-	40,000

Calculate the payback period and pay back profitability.

ADVANTAGES –

1. This method is quite simple and easy to calculate. It clarifies that there is no profit in any project unless the payback period is over as till then, only the cost is recovered.
2. It favours projects with shorter payback periods since risks normally stand to be greater in long term projects as future is uncertain.
3. The method is very useful in situations of liquidity crunch and high cost of capital as faster recovery of initial investment is necessary.
4. It is suitable when future is uncertain.
5. It indicates to the prospective investors when their funds are likely to be repaid.
6. It does not involve assumption about the future interest rate.

DISADVANTAGES / LIMITATIONS

1. The method stress on capital recovery ignoring the overall profitability. It fails to consider the returns which accrue after the payback period is over. Two projects with equal payback will be given the same ranking although their inflows after the payback period may different both in terms of years and quantum.
2. This method ignores the time value of money since the cash inflow are not discounted for the decision making process.
3. It fails to consider the cash inflows over the entire life of project. As a result, projects with larger cash inflows in the latter years may be rejected in favour of projects with larger inflows in their earlier year,
4. It does not consider the salvage value of an investment.
5. It makes no attempt to measure the percentage return on capital employed.

NET PRESENT VALUE (N.P.V.) METHOD

This method recognises that cash flows at different points of time differ in value and are comparable only when they are first brought down to a common denominator i.e. presents values. For this purpose every cash inflow and out flow are first discounted to bring down to their present value. The discounting rate normally equals the opportunity cost of capital. The net present value (N.P.V.) is the difference between the present value of cash inflow and the present value of cash inflow and the present value of cash out flow i.e.

Net present value = Total present value –Initial investment

Q :5) A company has to make a choice between 3 possible investment project A,B and C. The initial investment of Rs.11,000 in each investment will continue for 5 years and it has been decided that discount rate of 10% is acceptable for all three. The cash flow for three projects is

years	project -A	project -B	project -C
01	1,000	2,000	3,000
02	2,000	3,000	4,000
03	3,000	5,000	3,500
04	4,000	3,000	2,500
05	5,000	2,000	2,000

The discount factors at 10% are 0.909, 0.826, 0.751, 0.683, and 0.621 respectively for 5 years.

Q:6) Northan manufacturing co. Wishes to purchase a machine. You are to advice the directors from the following information supplied to you.

Particulars	Machine A (Rs.)	Machine B (Rs.)
initial outlay	10,000	10,000
Cash inflows : Years 1	1,000	3,000
Years 2	3,000	3,000
Years 3	3,000	3,000
Years 4	3,000	1,000
Years 5	3,000	-
Years 6	4,000	-

The cost of capital is 10%. The present value of Re. 1 at a discount factor of 10%

Years	1	2	3	4	5	6
Present Value	0.909	0.826	0.751	0.683	0.621	0.564

Q:7) Evaluate the following investment by payback period, payback profitability and NET present value assuming the cost of capital is 15%. Depreciation may be charged on straight line method and taxation is 40% per annum.

Initial outlay Rs.8, 00,000, scrape value will be Rs.50, 000 and estimated life of investment is 5 years. Profit before Tax are Rs.2,00,000 , RS.1,50,000 , Rs.2,30,000 , Rs.1,30,000 ,and Rs.1,80,000 respectively for 5 Years.

Present value of Re. 1 at 15% discount rate is follows.

Years	1	2	3	4	5	6
present value	0.870	0.756	0.656	0.572	0.497	-

Advantages of Net present value.

- a) Recognised time value of money - The most significant advantage of N.P.V. method is that it recognised time value of money on this point it is a fundamental improvement on the traditional method like payback period or A.R.R.
- b) Consider all cash flows - unlike the pay back method it takes into consideration all cash inflow and outflows over the whole effective life of the asset.
- c) Uneven cash flows - N.P.V. is the best method of evaluating projects where cash inflows are uneven.
- d) Make or Buy decisions - In situation like "make or buy" decisions where there are no cash inflows, NPV can be used but not the traditional methods.

Disadvantages of Net present value.

- a) Difficult = As compare to the traditional method NPV is somewhat difficult to understand as well as to use in practise as it involves a lot of calculation
- b) Estimation - estimation of cash flows is based on sales forecast, which is itself an uncertain element.
- c) Discounting rate - the calculation of net present value, pre suppose that the discount rate which is usually the companies cost of capital is known. But the calculation of cost of capital involves serious problem.
- d) Assumption - this method is based on the assumption that cash inflows occur at equally spread intervals at the end of the year it further assumes that the cash inflows can be reinvested in new projects.

Average / Accounting rate of return.

Under this method accounting profit is basis of evaluation. Here profit is expressed as a percentage of investment, although there are number of possible measures.

A.R.R. - $\frac{\text{Average profit after tax}}{\text{Average capital invested}} \times 100$

Average capital invested

Average profit after tax - $\frac{\text{total number of year's profit}}{\text{Number of years}}$

Number of years

Average capital investment - $\frac{(\text{cost} - \text{salvage value}) + \text{salvage value} + \text{net increase working capital}}{\text{Number of years}}$

Q:8) X limited is considering a proposal to purchase a machine whose particulars are given below.

Cost of machine – Rs.6, 00,000

Salvage value of machine – Rs.40, 000

Increase in net working capital – Rs.60, 000

Expected profitability from the machine (net profit after tax) –

years	1	2	3	4	5
net profit after tax	60,000	65,000	70,000	75,000	80,000

Advice the company using A.R.R. method whether the machine to be purchased or not if company required rate of return is 16%.

Q:9) Determine the average rate of return from the following data of two machines A and B.

Particulars	Machine A	Machine B
Cost	Rs.56,125	Rs.56,125
Estimated life in year	5	5
Estimated salvage value	Rs.3,000	Rs.3,000
Average income tax rate	55%	55%
Additional working capital	Rs.5,000	Rs.6,000
Annual estimated income after depreciation and tax :		
1 st Year	Rs.3,375	Rs.11,375
2 nd Year	Rs.5,375	Rs.9,375
3 rd Year	Rs.7,375	Rs.7,375
4 th Year	Rs.9,375	Rs.5,375
5 th Year	Rs.11,375	Rs.3,375
TOTAL	Rs.36,875	Rs.36,875

Depreciation has been charged on straight line method.

Q:10) Calculate the payback period, average rate return and net present value for a project which requires an initial outlay of Rs.1,00,000 and generates year ending cash flow of Rs.60,000 ,Rs.30,000 Rs.20,000 ,Rs.50,000 ,and Rs.50,000 from the end of first year to the end of fifth year. The required rate of return is 10% and income tax rate is 50%. The project has a life of five years and will be depreciated on straight line basis.

Present value of Re. 1 at 10% discounting factor:

Years	1	2	3	4	5
Discounting factor	0.909	0.826	0.751	0.683	0.621

Q:11) Calculate the payback period, the accounting rate of return and the net present value of the following proposal, if company's cost of capital is 10%.

Particular	Amount
Cost of fixed assets	1,00,000
Working capital	25,000
Useful life	4 Years
Residual value	20,000
Annual earnings before depreciation	30,000

Ignore income tax.

A factor for the present value of Re.1 is 0.91, 0.83, 0.75, and 0.68 respectively for 5 years.

Q: 12) Raj is considering purchasing a machine. Three machines, viz, A, B, and C are available, each costing Rs.500000 and having a useful life of 5 years. There is no scrap value. In comparing the profitability of the machines, a discount rate of 10% is to be used.

Earnings before depreciation are expected to be as under:

Cash Flows (Rupees)

Year	Machine A	Machine B	Machine C
1	2,00,000	75,000	1,00,000
2	2,50,000	1,50,000	2,00,000
3	1,50,000	3,00,000	2,00,000
4	1,00,000	2,00,000	1,00,000
5	75,000	1,00,000	75,000

Select the most profitable machine using the following methods:

- 1) Payback period
- 2) Net present value
- 3) Post payback profitability
- 4) Accounting rate of return.

Ignore income tax.

The discount factors at 10% are:

years	1	2	3	4	5
Discounting factors	0.9091	0.8264	0.7513	0.6830	0.6209

Advantages of ARR:

- 1) It is simple to understand and easy to adopt, as profit can be easily ascertained from the profit and loss account.
- 2) It brings into consideration the profits earned over the whole life of the project.

- 3) It allows the comparison of projects which require different amounts of initial capital investment.
- 4) The minimum required rate of return can be set with reference to the cost of the finance used by the company plus the additional return it requires for its own profit.

Disadvantages of ARR:

- 1) It is based on accounting profits and not on cash flows. Profits are not cash flows. Can we imagine some accountancy trying to deposit profits in the bank.
- 2) It does not take into account the time value of money, just as the payback method. Profits arising in different years are valued at par. It ignores the fact that profits can be reinvested. As profits can be earned on such reinvestments, the rate of return will not remain the same.
- 3) It considers only the rate of return but ignore the length of project lives.
- 4) Like payback method, this method is also open to question on the grounds that the period chosen is arbitrary. The number of years over which the asset is written off as well as the proportion which is written off every year, is usually arbitrary to large degree.
- 5) It is unreliable because the different concepts of profit and investment give different results.

CHAPTER-6

CASH BUDGET

Introduction:

The word Budget is derived from a French term "Bougette" which denotes a leather pouch in which funds are appropriated for meeting anticipated expenses. A Budget may be explained as comprehensive and co-ordinate plan expressed in financial (monetary) and/or quantitative (physical) terms drafted prior to a defined period time, indicating the policy to be pursued during that period for the purpose of attaining a given objective. For example, a Budget may provide for a sale of 8,000 covers (quantitative term) or a sale Rs.1, 20, 0000 (financial term) or both. Another definition of a budget is a "pre-determined statement of management policy taking the form of an estimate of future needs arranged according to an orderly basis, covering some or all the activities of an enterprise for a definite (future) period of time". Very often the budget is looked upon only from an accounting angle but the **human element is as important** the budget acceptance and workability is in the hands of human. Budget acts as business barometers as it is a complete programme of activities of the business for the period covered.

A study of various definitions reveals the following **elements of budget**.

- Budget is a detailed plan of what an enterprise endeavors to achieve.
- It indicates the business policy, which has to be followed so as to achieve a given objectives.
- It is a statement in terms of money or quantity or both (wherever feasible physical quantities should be determined before calculating the costs and revenues associated with them).
- It is prepared for a definite future period.
- It is prepared prior to the defined period.
- It provides a yardstick and measures for the purpose of comparison.

Characteristics of a Budget:

- 1) **Clarity of objectives:** Budgets are used to realize objectives. These objectives must be precisely spelt out so that budget preparation may be directed toward this end. The organization goal must be divided in functional goals. The two must not conflict with each other.
- 2) **Sound organizational set-up:** There should be well planned organizational set up with true and clear delegation of responsibility and authority.
- 3) **Budget education:** The employees should be imparted budgeting education. There should be meeting and discussions and the targets should be explained to the employees concerned. Employees should be properly educated about the benefits of a budgeting system and their role in the success of this system.
- 4) **Realistic target:** The target of the budgets should be realistic, if the targets are difficult to be achieved then they will not enthuse the persons concerned. A budget must be realistic and achievable. If a budget is viewed as soon as not attainable, manager may lose interest in it and the very purpose for which the budget was made – guidance and control is lost. This can be

- done by considering past experience, determining the key limiting factor and their effects, estimating what is likely to happen and knowing what can be made to happen.
- 5) Flexibility: The budget programme should be dynamic and its figures are not final. If figures are considered final the programme will become rigid. The budget should be flexible enough to permit the adjustments in the light of changed operational circumstances. This makes them more appropriate and realistic.
 - 6) Minimum limits only: Budget should be taken as only minimum and not maximum levels of performance. However, budget should not be suffocating and must offer executives sufficient operational freedom within their overall framework.

Classification of budgets (types of budget)

- On the basis of time: 1 long term budget 2 short term budget 3 current budget
- On the basis of flexibility: 1 fixed budget 2 flexible budget.
- On the basis of subject matter: 1 operating budget 2 capital/financial which together make up the master budget.
- On the basis of function: 1 sales 2 purchase 3 material 4 labour 5 overheads 6 cash 7 capital expenditure.

On the basis of time:

- 1) Long term budgets are those designed for a long period (generally for a period of 5-10 years). These budgets are concerned with planning the operations of a firm over considering long period of time. They are generally prepared in terms of physical quantities.
- 2) Short term budgets are designed for a period generally not exceeding 5 years. They are generally prepared in physical as well as in monetary units.
- 3) Current budgets cover a very short period say a month or a quarter. They are essentially short term budgets adjusted to current conditions or prevailing circumstances.

On the basis of flexibility:

- 1) Fixed budgets that are once prepared and not changed in any way during the budget periods. The master budget is fixed budget. A fixed budget is one that is designed to remain unchanged irrespective of the level of activity actually attained. It is prepared to definite (single) production capacity or activity level. It is not adjusted according to the activity level attained. Fixed budgets are unsuitable for comparison with actual cost/revenues figures that vary with activity level and arose from an activity level that differs from that budgeted. There will be always be variances in the achieved results and budgeted ones when using fixed budget especially with respect to the revenue and variable expenses. A fixed budget is of greatest use in controlling costs that are unrelated to activity level. Since in practical life, conditions do not remain static and in the hotel and catering industry owing to the unpredictability of activity levels, fixed budgets do not prove to be a very effective tool of control and find limited use in the industry in comparison to flexible budgets.

- 2) Flexible budgets also known as a variable or sliding scale budget. This is define as a budget, which, by recognizing different cost (and revenue) behavior patterns, designed to change as volume of activity changes. This is a dynamic budget. Actually level of activity/output may differ from budgeted level of activity / output and as such it becomes necessary to modify the budget on the basis of the revised output. The budget is prepared in such a way so as to present the budgeted costs and revenues for different level of activity, it is more realistic and practical because changes expected at different levels are given due to consideration. Flexibility budgets are an important tool of cost control as they allow comparison of actual results with those budgeted for the particular level of activity actually achieved, thus highlighting variances relating to efficiency rather than volume.

It is a budget, which by recognizing the difference between fixed, variable and semi variable cost, is designed to change in relation to the level of activity. Price fixation, quotations and tenders and new profit levels are facilitated at changed capacities. It is created in the following manner

- Decide range of activity
- Determine the cost behaviour of each element of cost
- Select the activity level (generally in terms of output)
- Prepare the budget at each activity level.

The scope of use of flexibility budget is high in revenue earning department of a hotel given that hospitality units suffer from the high degree of unpredictability of the volume of business.

On the basis of subject matter:

- 1) Operating budgets are concerned with income and expenditure of the business. Budgets for sales, purchases, labour costs, plant utilization, manufacturing expenses, production, and office expenses are therefore, operating budgets. The number of such budgets depends on the nature and size of the firm. In the hotel industry, operating budgets are prepared in respect of the various revenue earning departments as well as for the undistributed expenses of the business. Operating budget may be fixed type or flexible type. In order to make a good operating budget past sales, current trends, future outlook and relevant economic and (sometimes) political aspects must be considered. The operating budget for a firm may be constructed in term of programme or responsibility area.
- 2) Capital/ financial budgets in a business comprise budgets made for capital items such as capital funds (proposed issue of shares or debentures), capital expenditure for acquisition of fixed assets e.g. furniture, plant and machinery and working capital items such as stocks, debtors and cash. The cash position budget is of tremendous practical importance to the business. Essentially, capital budgets are budgets dealing with the assets and capital funds of a business. The capital budgets are brought together to create the budgeted (master) balance sheet. These budgets are concerned with the financial implication of operating budgets relating to the capital structure, asset investment (capital expenditure) and liquidity of an enterprise.

On the basis of function:

- 1) Sales budget is the most important budget and it sets the pattern for all other budgets. It is essentially a forecast of sales to be achieved in a budget period. It is influenced by potentially sales volume, sales mix and selling price policy. Sales revenues forecast for rooms, food and beverage and other items are only of limited value until they are related to the cost of sales and resulting Gross profit. The emphasis of the management would be to plan to attract more customers to sell vacant space and rooms to maximize profits.
- 2) Payroll and related budget may be prepared by drawing up staffing schedules based on the forecast of volume of rooms and covers sold. The number of permanent personnel to be employed all round the first determined followed by the extra number of staff required to service the level of business beyond which the number of permanent staff is not sufficient. It is labour budget and includes all expenses related to the work force like insurance, medical benefits, staff allowances etc.
- 3) Cash budgets – without sufficient amount of cash a business may find it difficult to meet its obligations and may soon run into financial difficulties. Cash is without doubt the lifeblood of a business. Liquidity and cash flow management are key factors in the successful operation of any organization and it is with good reason that the cash budget should receive close attention from both accounts and managers. A cash budget is a forecast of receipts (inflow) and payment (outflow), which is usually prepared on monthly basis for budget period. The cash budget shows the effect of budgeted activities – selling, buying, paying wages, investing in capital equipments and so on – on the cash flow of the organization. A cash budget is concerned the timing of cash flow

Only when all the operating and other capital budgets have been drawn up it is possible to produce the cash budget. Cash budgets are prepared in order to ensure that there will be just sufficient cash to cope adequately with budgeted activities.

Question on Cash Budget

CASH BUDGET

Q:1) Prepare a cash budget for a period of three months from April to June 2016.

MONTH	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
SALES	9,00,000	9,00,000	12,00,000	18,00,000	20,00,000	24,00,000
PURCHASES	4,00,000	5,00,000	9,00,000	9,00,000	10,00,000	11,00,000
WAGES	60,000	75,000	95,000	85,000	1, 50,000	1, 80,000

Consider the following adjustments.

- 1) Opening cash balance for the month of April is RS.20, 000
- 2) Suppliers give two months credit while customers pay 50% in the month of sales and balance with lag of two months.
- 3) Wages are paid with a lag of one month.

Q:2) prepare a cash budget of a company for April , may , June 2015 in columnar form using the following information.

Month	Sales	Purchases	Wages	Expenses
January	80,000	45,000	20,000	5,000
February	80,000	40,000	18,000	6,000
March	75,000	42,000	22,000	6,000
April	90,000	50,000	24,000	7,000
May	85,000	45,000	20,000	6,000
June	80,000	35,000	18,000	5,000

Further information –

- 1) 10% of the purchases and 20% of sales are for cash basis.
- 2) The average collection period of the company is half month and credit purchase are paid off regularly after one month
- 3) Wages are paid half monthly and the rent of RS.500 included in expenses is paid monthly.
- 4) Cash and bank balance on 1st April will be RS.15, 000.

Q:3) Prepare cash budget for the month January to march from the following information.

Month	Sales	Purchases	Wages	Overheads
November	7, 00,000	1, 50,000	80,000	40,000
December	11, 00,000	2, 00,000	1, 00,000	50,000
January	12, 00,000	2, 50,000	1, 20,000	60,000
February	14, 00,000	3, 00,000	2, 00,000	70,000
March	15, 00,000	4, 00,000	2, 50,000	80,000

Further information –

- 1) Opening cash balance on 1st January is expected to be Rs.50,000
- 2) 20% of sales and 40% of purchases are in cash.
- 3) Customer will pay the balance in two months from the month of actual sales and suppliers allow us a credit of one month.
- 4) Wages are paid in lag of half month.

Q:4) Raj limited expected to have Rs.38,500 cash in hand on 1st April and require you to prepare on estimation of cash position during three months April to June.

Months	Sales	Purchases	wages	factory exp.	office exp.	selling exp.
February	75,000	45,000	9,000	7,500	6,000	4,500
March	84,000	48,000	9,750	8,250	6,000	4,500
April	90,000	52,500	10,500	9,000	6,000	5,250
May	1,20,000	60,000	13,500	11,250	6,000	6,570
June	1,35,000	60,000	14,250	14,000	7,000	7,000

Other information

- Period of credit allowed by supplier is two months.
- 20% of sales is for cash basis and period of credit allowed to customer is 1 month.
- Plant has been order and expected to be received in May it will cost Rs.1,10,000.
- Delay in payment of all expenses is 1 month.
- The company is to pay dividend to share holders and bonus to workers of Rs.15,000 and 22,500 respectively in April.
- Income tax of Rs.57,500 is to be paid in June.

Q:5) From the following budgeted data forecast cash position at the end of April, May and June.

Month	Miscellaneous exp.	Wages	Purchases	Sales
February	28,000	40,000	3,36,000	4,80,000
March	32,000	48,000	4,00,000	5,20,000
April	24,000	32,000	4,16,000	3,20,000
May	48,000	40,000	4,24,000	4,64,000
June	24,000	32,000	3,20,000	3,52,000

Other information

- ❖ Income from investment Rs.20,000 received quarterly April, July.

- ❖ Wages 25% paid in arrears in following months.
- ❖ Miscellaneous expenses paid after 1 month.
- ❖ Rent Rs.4, 000 per month paid quarterly in advance due in April.
- ❖ Purchases these are paid for in the month following the month of supply.
- ❖ Income tax 1st installment of advance tax Rs.1, 00,000 will be paid on 15th June.
- ❖ 20% of sales released in 2 month of sales, balance released after two months.
- ❖ Cash in hand Rs.20, 000 on 1st April.

Q:6) From the following data forecast the cash position at the end of April, May and June, 2016.

Months	Sales	Purchases	Wages	Miscellaneous
February	6,00,000	4,20,000	50,000	35,000
March	6,50,000	5,00,000	60,000	40,000
April	4,00,000	5,20,000	40,000	30,000
May	5,80,000	5,30,000	50,000	60,000
June	4,40,000	4,00,000	40,000	30,000

Additional information-

- I. Sales = 10% realize in the month of sales, balance realized equally in two subsequent months.
- II. Purchases = they are paid in the month following the month of supply.
- III. Wages = 10% paid in arrears following month.
- IV. Miscellaneous exp. = paid in a month arrears.
- V. Rent Rs.5, 000 paid quarterly in advance due in April.
- VI. Income tax first installment of advance tax Rs.1, 50,000 due on 15th June.
- VII. Income from investment Rs.30, 000 received quarterly in April, July etc.
- VIII. Cash in hand Rs.30, 000 on 1st April, 2016.

Q:7) From the following particulars, prepare a monthly cash budget for the quarter ending 30th June, 2015.

Months	Sales	Purchases	Wages & expenses
January	1,00,000	40,000	40,000
February	1,10,000	45,000	42,000
March	1,00,000	50,000	44,000
April	1,10,000	60,000	46,000
May	1,20,000	40,000	48,000
June	1,30,000	60,000	50,000

Additional information

- a) Sales – 10% on cash, balance on one month credit.
 - b) Purchases -10% on cash, balance on 2 month credit.
 - c) Wages & expenses are payable twice in a month i.e. 1st and 16th respectively.
 - d) Estimated cash balance on 1st April, 2016 Rs.50, 000.
 - e) Other payments – income tax paid in June Rs.1, 000.
- Capital expenditure in April Rs.15, 000 and dividend payable in May Rs.10, 000.

Q: 08) Prepare a cash budget for the months of January, February and March 2018 from the following information.

Month	Sales	Purchases	Wages	Overheads
November	8,50,000	3,50,000	75,000	45,000
December	9,00,000	3,50,000	1,00,000	70,000
January	9,50,000	4,00,000	1,20,000	75,000
February	10,00,000	4,75,000	1,50,000	90,000
march	10,00,000	4,25,000	1,70,000	80,000

Notes:

- 1. Balance of cash on 1st January was Rs.1,60,000
- 2. 50% of all sales are on cash basis
- 3. Customers are given 2 months credit.
- 4. Suppliers grant credit of 2 months credit.
- 5. Wages are paid after a lag of half month and overheads lag of 1 month.

CHAPTER = 07

WORKING CAPITAL

Q: 1) A Performa cost of a company provides the following particulars.

Element of cost	Amount per unit
Raw material	80
labour	30
Overheads	60
Total cost	170
(+) profit	30
Selling price	200

The following particular are available.

- 1) Stock of raw materials in stock on an average one month, material are in process on an average half a month, finished goods in stock on an average one month.
- 2) Credit allowed by supplier's is one month, credit allowed to debtor's is two months, lag in payment of overheads expenses is one month and lag in payment of wages is one and half week.
- 3) Cash in hand and bank is expected to be Rs. 1, 00,000.

You are required to prepare statement showing the working capital required to finance a level of activity of one lakh four thousand units of production. You may assume that production and sale is carried out evenly throughout the year. Time period of four week equivalent to a month.

Q:2) From the following information prepare a statement showing working capital requirement.

Budgeted sales= Rs.6, 24,000 per annum.

Element of cost	Amount per unit
Raw material	09
Labor	12
Over heads	06
<u>Total cost</u>	<u>27</u>
profit	03
selling price	30

It is estimated that –

1. Raw material in stocks for 3 weeks and finished goods for two weeks
2. Factory processing takes 3 weeks.
3. Suppliers allowed 5 weeks credit.
4. Customers are allowed 8 week credit.
5. Add 10% safety margin to your calculation to provide for contingency.
6. Lag in payment of wages is $\frac{1}{2}$ week and lag in payment of overheads is 2 weeks.
7. Assume that production and over heads occur evenly throughout the year.

Q:3) ABC limited had annual sales of 50,000 units at Rs. 100 per unit. The company works for 50 weeks in the year. The cost details of the company are given below:

Element of cost	Amount per unit
Raw material	30
Labor	10
Overheads	20
<u>Total cost</u>	<u>60</u>
profit	40
Selling expenses	100

The company has the practice of storing raw material for four weeks. The wages and other expenses are paid after a lag of two weeks. Further, the debtors enjoyed the credit of ten weeks and the company gets a credit of four weeks from the supplier. The processing time is two weeks and the average finished goods inventory maintained for 4 weeks.

From the above information, prepare a Working Capital Estimate, allowing for a 15% safety margin.

Q:4) You are required to prepare

Level of activity of 18,000 units per year from the following information:

Raw material	- 12
Direct labor	- 3
Over heads	- 9
Total cost	24
Profit	+ 6
Selling price	30

1. R.M.R in stock on an average for 2months.
2. Material are in process in an average for half month
3. Finished goods are in stock on an average for 2 months

4. Credit allowed by creditor is 2 months and to debtors is 3 months.
5. Lay in payment for wages is half month and overhead is 1 month.
6. Cash on hand and bank expected to be Rs.7000

Q.5) A Factory produces 84,000 units. During the year and sell them at Rs.50 per unit. Cost structure of a product which is percentage of selling price is as follows

Raw material	55%
Labor	18%
Overheads	17%
Total cost	90%
Profit	10%
selling	100%

1. Raw material is 1.5 month.
2. Production process ,work in progress – 15 days
3. Finished goods – 1 month
4. Debtors – 1 month
5. Creditors- 2 months
6. Outstanding wages & overheads – 1 month
7. Cash at bank balance is to be maintained at 15% of working capital.

Q: 6) Following information has been extracted from the records of a company:

PRODUCT COST SHEET	RS/PERUNIT
Raw materials	45
Direct labor	20
Over heads	40
Total	105
Profit	15
Selling price	120

1. Raw materials are in stock on an average of 2 months
2. The materials are in process on an average for 4 weeks. The degree of completion is 50 %
3. Finished goods stock on an average is for 1 month.
4. Time lag in payment of wages and overheads is one and half weeks

5. Time lag in receipt of proceeds from debtors is 2 months
6. Credit allowed by suppliers is one month
7. 20% of the output is sold against cash
8. The company expects to keep cash balance of Rs 1, 00,000.
9. Take 52 week per annum.

The company is poised for a manufacture of 1, 44,000 units in the year.

You are required to prepare a statement showing the working capital requirements of the company.

Q:7) From the following data, prepare a statement showing working capital requirements for the year 2017.

- a) Estimated activity/ operations for the year 1,30,000 units (52 week)
- b) Stock of raw material 2 weeks and material in process for 2 weeks, 50% of wages and overheads are incurred.
- c) Finished goods 2 weeks storage.
- d) Creditors 2 weeks.
- e) Debtors 4 weeks.
- f) Outstanding wages and overheads 2 weeks each.
- g) Selling price per unit at Rs.15.
- h) Analysis of cost per unit is as follows:-
 - I. Raw material 33 1/3% of sales
 - II. Labour and overheads in ratio of 6:4 per unit
 - III. Profit is at Rs.5 per unit.

Assume that operations are evenly spread through the year.

Q: 08) The cost sheet of a company shows the following per unit costs:

particulars	Amount per unit
Raw materials	80
direct labour	30
overheads	60
total cost	170
profit	50
selling price	220

Other information:

- 1) Annual production is estimated to be 14,400 units.
- 2) Raw materials are in stock for one and half month.
- 3) Materials are in process for a month.
- 4) Finish goods are in stock for month.
- 5) One fourth of the output is on cash basis.
- 6) The balance is sold at two month credit.
- 7) Suppliers give us on one month credit.
- 8) Cash on hand is estimated to be Rs.50,000

Draw up a statement showing the estimate of working capital required along with a contingency reserve of 10%.

Chapter-07

Working Capital Management

Meaning and nature of working capital

Capital required for business can be classified under two categories like.,

- i) Fixed capital
- ii) Working capital

Every business needs funds for two purposes for its establishment and to carry out its day to day operations. long term funds are required to create production facilities through the purchase of fixed assets such as plant and machinery, land and building, furniture, etc. investment in these assets represent that part of the firm's capital that is blocked on a permanent or fixed basis and is called fixed capital. Funds are also needed for short term for the purpose for the purchase of raw materials, payment of wages and other day to day expenses etc. these funds are known as working capital. In simple words, working capital refers to that part of firm's capital that is required for financing short term or current assets such as cash, marketable securities, debtors and inventories. Working capital is the amount of funds required to finance day to day operations and activities of the business. Funds invested in current assets keep revolving fast in a cyclic and continuous manner and are being constantly converted into cash and this cash flows out again in exchange for other current assets. Hence, such working capital is also known as revolving or circulating capital or short term capital.

Working capital is that part of the total investment in an enterprise that provides liquidity to its day to day business activities and operations. Liquidity and profitability are the two aspect of paramount importance in a business. Liquidity depends on the profitability of business activities and profitability is hard to achieve without sufficient liquid resources. Both these aspects are closely inter-related. Thus adequate of working capital for the firm's level of activity can be described as vital and critical to its success.

Business activities are dynamic in character. Movement of funds from working capital to income and back to working capital is one of vital characteristics of business administration. The adequacy of cash and other current assets, together with their efficient handling virtually determine the survival or death of the enterprise.

NEED OF WORKING CAPITAL

The need for working capital arises because for the time gap (a lag) between purchasing of the raw material and the realization of the cash from the sale of the finished goods in business operations. There is a time gap between purchase and production and sales, between sales and realization of cash. Cash realization from continuous cycle and require to be financed with cash. In other words there is a gap from the time the cash is input into this operation cycle until it is recovered as it gets blocked in the various stages of the cycle. During these time gaps, the organization must have sufficient liquidity to finance these activities that include.

- ❖ Meeting the cost of raw materials, work in progress, finished goods, spare etc.
- ❖ Paying the wages and salaries of direct labour.
- ❖ Paying the overhead expenses.
- ❖ Paying the other operational expenses such as advertising, salesmanship, after sales service, delivery service, etc.

The above cycle is called the working capital cycle or operation cycle, which is discussed later.

Definitions

Following are the different ways in which working capital has been defined by various authorities.

Hoagland has defined working capital as the "difference between the book value of the current assets and current liabilities". But the term current may mean either a liquid item (e.g. cash) or a circulating item (which moves around e.g. finished goods stock changes into debtors on sale, which in turn changes into cash on realization. This definition has found wide favor with accountants. The definition is qualitative in character, since it shows the possibility of availability of current assets over current liabilities. It represents an index of financial soundness of enterprises.

The definition of working capital given by Shubin is more illustrative. He defines working capital as "the amount of funds necessary to cover the cost of operating the enterprise. Working capital in a good concern is a revolving fund, it consist of cash receipts from sales which are used to cover the cost of current operations".

Grestenberg defines working capital as follows. "Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, as for example, from cash to inventories, inventories to receivables and receivables to cash".

OBJECTIVES OF WORKING CAPITAL MANAGEMENT

- 1) To minimize the amount of Capital employed in financing the current assets. This will also lead to an improvement in the "Return on Capital employed".
- 2) To manage the current asset in such a way that the marginal return on investment in these assets is not less than the cost of capital acquired to finance them. This will ensure the maximization of the value of the business unit.
- 3) To maintain the proper balance between the amount of current assets and liabilities in such a way that the firm is always able to meet its financial obligations whenever due. This will ensure the smooth working of the unit without any production held ups due to paucity of funds.

THE WORKING CAPITAL CYCLE OR OPERATING CYCLE

While a firm may require several years to recover the initial investment in fixed assets, its investment in working capital is turned over many times in a year. An operating cycle means "the complete process of transformation of cash introduced in business operations into other forms of current assets and 'retrieval' of cash finally towards the end of the process". The need of work in capital arises mainly because of time gap between the production of goods and their actual realization after sales. It is this gap that is technically referred to as the "Working capital cycle" or Operating cycle" of the business. The distinct phases of the cycle are as follows

In a manufacturing concern this cycle begins with the introduction of cash, which, is used for procurement of raw materials and other inputs. Hence cash is converted into raw material inventory. Stocks of raw material and work-in-process are kept to ensure smooth production by guarding against non-availability.

Then the raw material is issued to production which converts it into 'Work-in-Progress' which is primarily the interim stage between raw material and the finished products.

After going through production cycle, a finished product is obtained as output, which is known as 'Inventory of finished goods'. The firm holds stock of finished goods to meet the demands of customers on continuous basis and sudden demand from some customers.

Later on, the finished goods are sold to customers on credit, which converts inventory of finished goods into 'receivable or debtors' book debts (accounts receivable) are created because goods are sold on credit for marketing and competitive reasons.

In course of time these customers settle the bills, which realize 'cash', or the amount is realized from the bank by discounting the bill of exchange accepted by the customer hence 'cash' is retrieved and the cycle comes to an end.

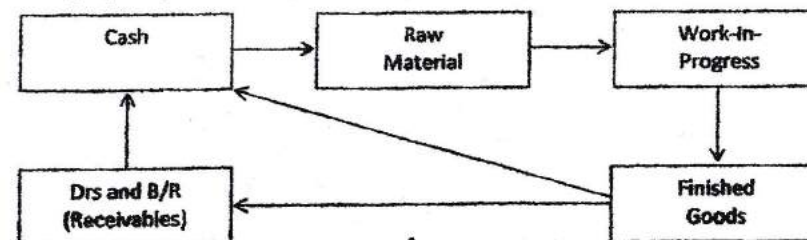
These phases affect cash flows, which most of the time, are neither synchronized nor certain. They are not synchronized because cash out flows usually occur before cash inflows. They are not certain because sales and collections, which give rise to cash inflow, are difficult to forecast accurately. Cash outflows, on the other hand, are relatively certain.

The firm is therefore required, to invest in current assets for a smooth, uninterrupted functioning. It needs to maintain liquidity to purchase raw materials and pay expenses such as wages and salaries, other manufacturing, administrative and selling expenses and taxes as there is hardly a matching between cash inflows and outflows. Cash is also held to meet any future exigencies.

The length of the operating cycle of manufacturing firm is the sum of: (i) cash conversion to raw materials period (ii) inventory conversion period. (ICP) and (iii) book debts conversion period (BDCP). The first component is the time it takes to purchase the raw material supply to start off the cycle. The next, the inventory conversion period is the total time needed for producing and selling the product. Typically, it includes: (a) raw material conversion period (RMCP), (b) work-in-process conversion period. (WIPCP), and (c) finished goods conversion period (FGCP). The last, the book debts conversion period is the time required to collect outstanding amount from customers. The total of inventory conversion period and book debts is sometimes referred to as gross operating cycle (GOC).

In practice, a firm may acquire resources (such as raw materials) on credit and temporarily postpone payment of certain expenses. When this happens there is no need to introduce cash in the very beginning, instead an obligation to supplier is incurred in the form of accounts payable (thereby acting as a spontaneous source of capital). The cash is introduced later, when the amount payable to the supplier is due. The payables deferred period (PDP) is the length of time the firm is able to defer payments on various resources purchases. The difference between (gross) operating cycle and payables deferral period is net operating cycle (NOC). It is net time interval between cash collections from sale of the product and cash payments for resources acquired by the firm. It also represents time interval over which additional funds, called working capital, should be obtained in order to carry out the firm's operations.

The working capital cycle can be represented by the following diagram:

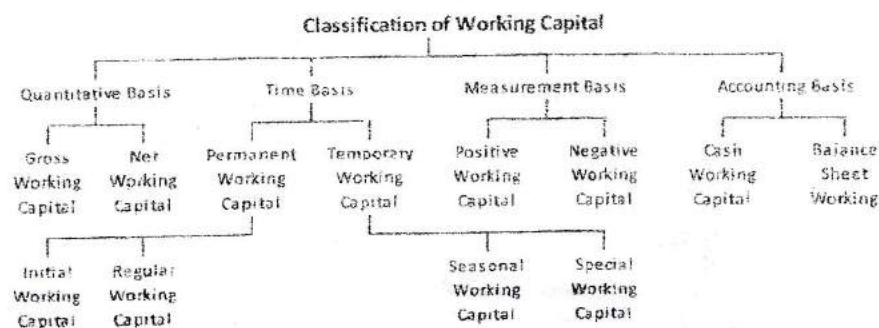


Thus, we see that the cash invested at the onset of the cycle rotates through various current asset forms and is eventually converted back to cash that is then re-invested. At any given time cash is blocked in the form of the various current assets. These current assets change form and are used to pay off current liabilities. This changing of assets due to and in course of operational activities constitutes the Working Capital Cycle or Operating Cycle. The credit granted (accommodation made) by creditors for materials and expenses offset the investment in current assets to some extent and hence their value is subtracted while computing working capital requirements in a firm. It is imperative to estimate with reasonable accuracy the amount of cash that would be blocked in the operating cycle of a firm.

An important point to be noted here is that the amount of cash introduced in the commencement of cycle as 'input' need not agree with that retrieved at the end of the cycle as an output. When the amount retrieved at the end exceeds the amount put in initially, the excess represents profits and vice versa. Since such excess arises due to profit, it is said that the profits generated the funds. The element of profit originates at a stage where the inventories of finished goods are liquidated through sale to customers. The finished goods represent the 'cost' incurred in course of business operations, while sale represents 'revenue' or 'price' earned as a result of liquidation of inventories. This is how 'revenue' (inflow) and 'cost' (outflow) are matched with each other and the excess of former over latter yields profit. On the other hand, excess of latter over former would mean 'loss', as the cost incurred is not recovered in full. Losses erode or deplete the funds. However, profits originated at the stage of conversion of finished goods into receivables are only 'accrued', yet to be realised. The realization of profits takes place, when the amount receivable from customer is actually received. Hence, the cycle is completed when the receivables are collected.

CLASSIFICATION OF WORKING CAPITAL:

Working capital has been classified in number of ways of which the important ones are:



Gross Working Capital

Gross working capital represents the amount of funds invested in current assets only. In other words it is the value of the total current assets only. It is defined with current assets, alone. It is the value of non-fixed assets of an enterprise like inventories (raw materials, work in progress, finished goods, spares and consumable stores), receivable, short-term investments, advance with suppliers, loan tender deposits, sundry deposits with excise and customs, cash and bank balance, prepaid expenses, incomes receivable etc. $\text{Gross Working Capital} = \text{Current Assets}$. This concept of working capital is sometimes preferred, as every management is more interested in the total current assets with which it has to operate than the sources from where it is made available. Further, this concept is more useful in determining the rate of return on investments in working capital.

Net Working Capital

Net Working Capital is an excess of current assets over current liabilities. It is, therefore equal to current assets minus current liabilities. In other words it is the value of the short-term (non-fixed) assets minus accommodation provided by trade creditors, bank etc. on short-term basis. This concept of working capital is more widely accepted in general practice. Net working capital is referred to simply, as working capital.

$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$. This concept is a qualitative concept that indicates the firm's ability to meet its operating expenses and short-term liabilities. It indicates the margin of protection available to short-term creditors. It also suggests the need for financing a part of the working capital out of long-term funds. Although widespread in its usage this approach still does not reflect the exact position of working capital as (i) debtors include the profit element (ii) long outstanding Owings to the firm may not have been written off and (iii) non-moving, slow moving and obsolete items may have been included in inventory.

When obsolete and non moving items of inventories are excluded the figure arrived at is often termed as 'Tangible Working Capital'

Differences between Gross Working Capital & Net Working Capital concept

Gross Working Capital	Net Working Capital
Gross Working Capital = Current Asset	Net Working Capital
A Quantitative Concept	A Qualitative Concept
It indicates the strength of current position of a business organization, but not its true financial position	Is considered to be the index of liquidity (financial soundness) of the firm and reveals the true financial position of a company
Cannot measure the change in working capital and analyses the flow of funds	It is immensely useful in measuring the change in the financial position of the firm
This concept is financial or going concern concept	This concept is an accounting concept of working capital

Permanent or fixed Working Capital

This is the amount of current assets required on a continuing basis over the entire year. It represents the amount of cash inventory and debtors maintained as the minimum to carry on operations at any time. Permanent working capital is locked in the business so long as it continues to exist. Permanent working capital is of two types:

Initial Working Capital

This is the amount of capital, which is required at the inception of the organisation. In the initial stage, its revenue may not be regular, it may be difficult to get credit from the banks, it may be required to grant credit to customers. In such a case, adequate working capital is required to start the circulation of capital and keep it moving till the collections from debtors are more than payments.

Regular Working Capital

It is the amount of capital required for the continuous operations of the enterprises. It refers to excess of current assets over current liabilities. The organisation has to keep a minimum stock of materials, finished goods to ensure its smooth working and cash to meet other immediate obligations.

Variable (or temporary) Working Capital

This capital is also called as circulating working capital. It varies with the variations in many factors. Variable working capital is of two kinds.

Seasonal Working Capital

This is the amount of working capital required at stated intervals to meet the demand of seasonal requirements. When the season approaches the organization needs more funds to meet the seasonal pressure of demand. For e.g., A toy manufacturing company would require large amount of fund a few months before Christmas. During the rest of the period the requirement of working capital is much less.

Special Working Capital

This is the amount of working capital that is required to meet unforeseen eventualities that may arise during the course of operations. Therefore the organisation must have additional funds to meet such emergency situations such as sudden spurt in demand, war contracts, strikes, fire, floods, rioting unexpectedly, severe competition, drastic rise in taxes etc. The concept of permanent and variable working capital is illustrated in the following diagram:

Positive Working Capital

If the current assets are more than the current liabilities, we get a positive working capital. Thus, if the current assets are Rs.5 lakhs and the current liabilities are Rs.4,20,000, the working capital is Rs.80,000.

Negative Working Capital

However, if the current liabilities exceed the current assets, we get a negative working capital. Thus, if the current assets are Rs.4 lakhs and the current liabilities are Rs.4,50,000, the working capital is negative to the extent of Rs.50,000.

In a business firm, one does not across a negative working capital as such, but the situation might overtake a business under some circumstances. Generally a negative working capital suggests the lack of liquidity and solvency and it might as well denote a danger signal or a crisis for the business. However it may not be so in all circumstances a business selling monopoly product receives advances against sales and might carrying negligible stocks of finished products, and this would result in a negative working capital. Positive and negative working capital may be considered as extensions of the concept of net working capital.

Balance Sheet Working Capital

The customary way of determining the working capital is to ascertain the difference between the current assets and current liabilities as per the balance sheet prepared at the end of the financial year of a given firm. Such working capital as per the balance sheet of a firm is known as balance sheet working capital. By its very nature, the concept of a balance sheet working capital is static in nature, as it reveals the position of working capital as at the end of accounting year. It does not reveal the flow of money or values occurring between the two balance sheet dates.

Cash Working Capital

The real flow of the funds however, is reflected and contained in the income statements i.e. the profit and loss account in between the two balance sheet dates, it reveals the flow of items as well as the operational inflow and outflows of cash and/or credit through the items contained therein. The working capital derived from this source is known as cash working capital. Thus the cash working capital refers to that working capital which is available in cash or cash resources.

IMPORTANCE/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 short term solvency of the business by providing uninterrupted flow of production and makes it able for a firm to meet current obligations.
- 2) **Goodwill:** Sufficient working capital enables a business concern to make prompt payments and hence helps in creating and maintaining goodwill. It contributes to the prosperity and progress of the business.
- 3) **Easy loans:** A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and others on easy and favorable terms.
- 4) **Cash discounts:** Adequate working capital also enables a concern to avail cash discounts on the purchases and hence reduces its costs.
- 5) **Regular supply of raw material:** Sufficient working capital ensures regular supply of raw materials and continuous production.
- 6) **Regular payment of salaries and other day-to-day commitments:** A company which has adequate working capital can make regular payments of salaries, wages and other day-to-day commitments which raises the morale of its employees, increases their efficiency, reduces wastage and costs and enhances production and profits.
- 7) **Exploitation of favourable market conditions:** Only a concern 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 in the future.
- 10) **High morale:** Adequacy of working capital creates an environment of security, confidence, high morale and creates overall efficiency in a business.

EXCESS OR INADEQUATE WORKING CAPITAL

Every business concern should have adequate working capital to run its business operations. It should have neither redundant or excess working capital nor inadequate nor shortage of working capital. Both excess as well as short working capital positions are unfavourable to any business. However, of the two, it is the inadequacy of working capital which is more dangerous from the point of view of the firm.

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 the 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 organisation.
- 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, value of shares may also fall.
- 7) Redundant working capital may give rise to speculative transactions.

Disadvantage or Dangers of Inadequate Working Capital

- 1) A concern that 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 requirement 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 business.
- 5) It becomes impossible to utilise efficiently the fixed assets due to non-availability of liquid funds.
- 6) The rate of return on investments also falls with the shortage of working capital.

FACTORS DETERMINING WORKING CAPITAL REQUIREMENTS

The amount of working capital that would be required by an organisation depends upon many factors. The important factors are discussed below:

- 1) **Nature or character of Business:** Requirement of working capital of an organisation is related to the type of business it conducts. Public utility undertakings like water supply and electricity needs limited working capital because they offer cash sales only and supply services not products require less working capital because they sell services on cash basis only. On the other hand trading and financial firms have to invest in large amounts in inventories, receivables and cash (though less in fixed assets) and as such require large amounts of working capital. Manufacturing undertakings also require a sizeable amount of working capital (along with fixed investments). Generally speaking, it may be said that public utility undertakings require small amount of working capital,

trading and financial firms require relatively very large amount, whereas manufacturing units require sizeable working capital between these two extremes.

- 2) **Scale of Operation (level of activity)/Size of Business:** The working capital requirements of a concern are directly influenced by the size of its business which may be measured in terms of the scale of its operations. Greater the size of a business unit, generally larger will be the requirement of working capital. However in some cases, even a smaller concern may need more working capital due to high overhead charges, inefficient use of available resources and other economic disadvantages of small scale operations.
- 3) **Manufacturing Process/Length of Production Cycle:** The term "Production or manufacturing" cycle refers to the time lag between the purchase or procurement of raw material and the completion of finished product. If the production process or cycle in an organisation takes a relatively long period, more working capital is going to be required while if the production cycle is shorter (like in food catering operations) the requirement of working capital investment will be less.
- 4) **Firm's Credit Policy (Terms of Purchase and Sale) and Policy and Practice regarding payment of Labour and Overheads:** A business organisation making purchases on credit basis and selling on cash basis would require less working capital. An organisation selling goods on credit basis would require more working capital than if they goods were sold on cash basis only. If payment is to be made in advance to the suppliers, more working capital would be required. Therefore, terms of purchase and sales have influence on working capital requirements of the organisation. Likewise, the greater the lag time in payment of wages and overheads the lower the need for working capital

Note: The lag period that raw material inventory is stored before it is issued for production combined with the above two factors length of the production cycle and credit policy practiced with regards to debtors create determine the length of the working capital cycle - the longer the period of this cycle the larger the requirement of working capital.

- 5) **Production policy:** The seasonal fluctuations in production affect working capital. Production could either be kept steady by accumulating inventories during slack, periods with a view to meet higher demand during peak season or production, could be curtailed during slack season and increased during peak season. The former policy will require higher levels of working capital.
- 6) **Degree of Seasonality:** When raw material availability is restricted to certain, times of the year only, then such concerns have to buy in bulk during such times so as to enable continuous and uninterrupted flow and process during the entire year and a huge amount of working capital gets blocked during such periods in the form of material inventories. Generally, during the busy season, a firm requires larger working capital than during slack season operations; for example, a resort hotel. The trend of

seasonality is generally an inherent part of the industry (or sub industry) to which the firm belongs

- 7) **Sensitivity to Business Trade Cycle Fluctuations:** Business cycles refer to alternate expansion and contraction fluctuations in general business activity. In a period of boom (prosperity) there is a need for larger amounts of working capital due to increase of sales, optimistic expansion of business etc. On the contrary, in times of depression sales decline and a firm will find it needing much less working capital or may even find its working capital redundant. On the other hand, when recovery starts after recession, shortage of working capital may be felt.
- 8) **Rate of Growth (and diversification) of Firm:** In general, a business on the fast track in a phase of high growth, expansion in terms of volumes and diversification activities will require larger amounts of working capital than firms having a normal rate of expansion, those that are stagnating or those experiencing negative growth. The need for increased working capital does not follow the growth of business firms but precedes it as it is the working capital need that is first assessed in reference to the business plan.
- 9) **Firm's Earning Capacity and Dividend Policy:** Some firms have greater earning capacity than others, owing to quality of their products, monopoly conditions etc. Such firms may generate cash profits from operations and contribute to their working capital. A firm that maintains a steady high rate of cash dividend irrespective of its generation of profits needs more working capital than firms that retain larger part of its profits and do not pay such high rates of cash dividend. Shortage of working capital reduces cash dividend.
- 10) **Price level changes:** Generally rising prices (inflationary conditions) will require the firm to maintain larger amounts of working capital as more funds will be required to maintain the same level of current assets. The effect of rising prices may be different for different firms. Some may be affected much while others may not be affected at all by escalating changes. One more point that is relevant is that during inflation, the need for working capital goes up significantly, due to tendency of stock piling.
- 11) **Quantum of stock of raw material to be held:** Some firms are required to store large quantities of raw material for the production. The reasons for keeping such large reserves of raw materials may be seasonal nature of raw materials, scarcity (as opposed to stable supply) and lengthy procurement times (lead times). The last mentioned is more apparent when the supplies are controlled by Government departments or semi-Government Corporations. Higher levels of raw inventory means comparatively higher requirement of working capital.
- 12) **Turnover of Inventories/rate of stock turnover (including warehousing facilities):** An organisation having low turnover of inventory (raw material and finished product) would require more working capital, high turnover needs lesser amount of working capital. These turnover rates could be linked to (i) perishable/semi-perishable/durable

nature of goods (ii) low/high demand for products and (iii) greater/lesser god own and warehousing space and facilities.

Warehousing facilities afford an opportunity for stock-piling, when it is desired, hence the need for working capital may go up. While the company having poor storage may require less amount of working capital, as it cannot accommodate stocks, even if it is so desired.

13) **Operating Efficiency/Management Ability:** Operational efficiency implies the optimum utilization of resources at minimum possible cost by eliminating waste improving co-ordination and proper planning it result in higher profits improves the internal generation of funds and hence lowers the amount of working capital to be blocked.

14) **Other Factors:** In addition to the above, extent of co-ordination between production and distribution policies, import and taxation policies, asset structures, banking facilities (accessibility to credit), political stability, degree of risk in business ventures etc all have an impact in determining the amount of working capital required. Two of them are discussed below

Monetary policies of Government: Whenever the government, adopts 'tight money policy' so as to restrict money supply, it creates strain on working capital, since the need increases all out.

Network of Infrastructure: Firms that have facilities of quick transport and communication and ready access to other infrastructure requires less amount of working capital than that having no such advantage e.g. companies in underdeveloped or backward region.