8.1 IMPORTANCE OF FINANCIAL MANAGEMENT

Finance is the life blood of any enterprise. It is a scarce commodity. Great difficulty is experienced in getting this commodity and hence it must be very judiciously used. The existing theories and aspects of financial management have been refined. The financial environment has changed considerably. The theme of financial management is structured round the decision making in the three inter-related financial areas, viz, investment—long term as well as short-term, financing and dividend policy.  

The scope of financial management is broadened. Presently, in addition to procurement of funds, efficient use of resources is also universally recognised. This chapter makes an attempt to expose as how the funds of the sample units of Indian magnesite industry have been procured and how effectively they have been utilised by them.

8.2 OBJECTIVES OF FINANCIAL MANAGEMENT

Financial management is concerned with decision making in regard to the size and composition of assets and the level and structure of financing. To make
wise financial decisions, a clear understanding of the objectives of financial management is necessary. The term objective is used in the sense of a decision criterion for the three decisions involved in financial management. It implies that what is relevant is not the overall objective of a business but an operationally useful criterion by which to judge a specific set of mutually interrelated business decisions, namely, investment, financing and dividend policy. Based on the above views there are two widely discussed financial objectives and they are (i) profit maximisation, and (ii) wealth maximisation.

Profitability refers to a situation where the value created by the use of resources is more than the total of the input resources. It leads to efficient allocation of resources as resources form the basis for profitability.

Wealth maximisation refers to the maximisation of the value of a firm to its shareholders.

There is an interesting controversy regarding the goal of financial decision making. i.e whether it should be profit maximisation or wealth maximisation.

Wealth maximisation is almost universally accepted as an appropriate operational decision for the financial management decisions as it satisfies the three requirements of a suitable operational objective of finan-
cial courses of action, namely, exactness, quality of benefits and the time value of money.  

The mission of financial management is to maximise the value of the firm so that the interests of the different sections of the community remain undisturbed and protected.  

Prof. Solomon (Stanford University) states that the proper goal of financial management is wealth maximisation. He concludes that even if management has other motives such as maximising sales or size, growth or market share, or their own survival or peace of mind, wealth maximisation maximises the achievement of these other objectives also.

In the back-drop of the above views, if we consider the objectives of financial management followed by the sample units, it can be seen that wealth maximisation objective is not given that much importance. This is due to the kind of the units.

Two of the sample units are Government undertakings and hence they do not strive much for maximising wealth to their shareholders as all the shares are held by the respective governments. The third one is a joint sector unit. In this unit, 41% of the capital is held by a state government, 39% is held by a private sector company, and 20% is held
by a government undertaking. Hence this unit also does not much care to maximise its value. The fourth one is a private sector unit. This is a member of a large group. Hence this unit also is unable to decide its financial activities independently so that the value of the firm can be maximised.

Under these circumstances, the objective of the financial management of these units have been forced to concentrate on profit maximisation rather than on wealth maximisation.

8.3 ORGANISATION OF FINANCE DEPARTMENT

The organisation of finance department in all the units of the study are almost similar except for the size and designations. The department is headed by a manager. Under the head of the finance department, there are accounts managers. Depending upon the volume of work and the policy of the company, there are deputy and assistant managers to look after various functions such as stock verification (materials), EDP, costing, internal audit, etc.

Under the assistant managers, there are accountants, then senior and junior assistants (clerks), typists and then attenders. The organisation chart of the finance department is shown in chart 8.1.
8.4 FINANCE PERSONNEL

In the finance departments of all the units, the assistant managers and above are professionally qualified - either chartered accountants or cost accountants. French professionals are directly recruited as junior managers and on experience, they are promoted to higher positions. If there is a need to recruit for higher positions of the department, persons with sufficient experience are selected.

Usually, commerce graduates are selected as accountants and senior / junior assistants. On gaining
experience and acquiring professional qualifications, they may be promoted to higher positions.

Usually, the managers are not transferred to other departments. Even if they are associated with other departments, their function will only be relating to finance. For instance, in one unit, an assistant manager (accounts) is associated with materials, department to look after the financial aspects relating to materials purchase and control. The clerical staff, typists and attenders are transferable to other functional departments.

8.5 FINANCING MIX (CAPITAL STRUCTURE)

The capital structure of a company refers to the composition of its long-term sources of funds. The long-term funds have mainly two components, viz., own funds and borrowed funds. Own funds include share capital and retained earnings. Borrowed funds include debentures, long-term loans from financial institutions, etc.,

The capital structure (financing mix) of the sample units are given in Appendix 8.1

A review of the capital structure of these units does not show clearly the basis on which they have made their financing mix.
In unit I own funds are more than the borrowed funds. In unit II own funds were more upto 1986 - 87' than the borrowed funds and thereafter, the borrowed funds have risen than the own funds. In unit III, the own funds are more than borrowed funds but the difference is very less. In unit IV the borrowed funds are significantly higher than the own funds.

This review of financing mix of these units induces us to study why they have been so decided. In other words it must be checked to know whether the capital structure of these units is the best (optimum) one.

The optimum capital structure may be defined as that capital structure or combination of debt and equity that leads to the maximum value of the firm. With an optimum debt and equity mix the cost of capital is minimum and the market price per share (or total value of the firm) is maximum. But the question is : Is there any such optimum capital structure and if so what it is? There are varying opinions.

There is a viewpoint that strongly supports the close relationship between leverage and value of a firm. There is an equally strong body of opinion which believes that the combination of debt and equity has no impact on the
shareholders' wealth and the decision on financial structure is irrelevant.\(^7\).

These contradicting opinions indicate that identifying the precise percentage of debt that will maximise price per share is almost impossible. At the most, an approximate proportion of the debt to be used in the financial plan in conformity with the objectives of maximising share prices may be determined.\(^8\).

This is because there are certain common and often conflicting considerations involved in determining the method of financing assets. The use of debt in lieu of equity represents essentially a gamble in which the firm sets a part of its future.\(^9\). The determination of the most desirable debt-equity ratio is affected by consideration of suitability, risk, income, control, flexibility and timing. The relative weights assigned to these factors will vary from company to company depending upon the general economic conditions, the characteristics of the industry and the particular position of the company. And above all the freedom of management to adjust the mix of debt and equity is limited by the availability of various types of funds that are sought. These factors are highly complex and cannot fit entirely into a theoretical framework. From the operational standpoint, therefore, what should
be attempted is an appropriate capital structure, given the facts of a particular case.\(^\text{10}\).

A decision of the proper balance of security issued and debt debentures can be made only within the context of the individual company at a specific stage in its history. It is possible by having a reasonable knowledge of its special circumstances, of the attitudes and objectives of its owners and management, of the actual and anticipated conditions of capital market and of the economic, monetary and fiscal polices of the Government.\(^\text{11}\).

The financial executives of the sample units state that the capital structure of their respective companies have been designed in consideration with the various factors which influence the structure. In the case of two Government companies, the financing mix is as per the policies and directions of the respective governments. In the case of a private sector company, it is between risk and return. In the case of a joint sector company, it was as per the directions of the government upto some time and thereafter it is based on risk and return.

It should be remembered that financial theory has not developed to the stage to provide an ideal financial structure in concrete terms. Consequently, human judgment must be used to resolve the many conflicting forces in
laying plans for the type of funds to be sought. This is what the various units have exercised in deciding their financing mix.

8.6 COST OF CAPITAL

8.6.1 DEFINITION OF COST OF CAPITAL

Cost of capital may be defined as the minimum rate of return that a firm must earn on its investments for the market value of the firm to remain unchanged.

8.6.2 SIGNIFICANCE OF COST OF CAPITAL

The cost of capital provides a yard stick to measure the worth of investment proposals and thus performs the role of accept - reject criterion. As an operational criterion, it is related to the firm’s objective of wealth maximisation. The accept-reject rules require that a firm should avail of only such investment proposals as promise a rate of return higher than the cost of capital. The overall cost of capital assumes prime importance in a firm as it helps designing the capital structure of the firm which is the main focus of financial management in maximising the total value of the firm.

8.6.3 PROBLEMS IN CALCULATING COST OF CAPITAL

Determining the cost of enterprise’s capital perhaps is the most complex and controversial in business
finance with a number of conflicting theories trying to explain this elusive term while there is no unanimity of opinion as to which one is the most satisfactory. The calculation of cost of capital poses a very big problem in the case of the Indian magnesite industry due to its nature and status.

8.6.4 SPECIFIC AND WEIGHTED COST OF CAPITAL

The capital of a firm is obtained from various sources. Obviously, each source of fund has its cost. This cost is called as 'specific cost' of capital. When these specific costs are combined to arrive at overall cost of capital, it is referred to as the 'weighted cost' of capital of the firm.

8.6.5 COMPONENTS OF CAPITAL STRUCTURE OF THE INDUSTRY

The capital structure of the sample units have three components, namely, (i) equity capital, (ii) retained earnings, and (iii) debt capital. No unit has performance share capital.

The following pages explain the cost of capital of each source of capital used by the sample units.
8.6.6. COST OF EQUITY CAPITAL

The cost of equity may be defined as the minimum rate of return that a firm must earn on the equity-financed portion of an investment project in order to leave unchanged the market price of its stock.\textsuperscript{16}

There is no definite commitment to the equity holders to pay dividend every year. It may therefore appear that equity capital does not carry any cost. But it is not so. In fact the cost of equity is relatively the highest as they involve the highest degree of financial risk.

There are different approaches for estimating the cost of equity, viz (i) Dividend/Price ratio, (ii) Earnings/Price ratio, (iii) (Dividend/Price)\textsuperscript{+} growth rate of earnings, and (iv) Realised yield approach.

The determination of the cost of equity for the various units of the study is a very difficult job. Because, two government undertakings have not declared dividends during the past due to their poor performance. The joint sector unit also, due to its poor performance, could not declare dividend during the past eight years. Further as majority of the shares of these units are held by government and government undertakings, the shares are not available in the market and hence these is no market price for
these shares. Only one unit has declared dividend during the past. In the case of this unit, which is a member of a large group of companies, the capital invested in this unit alone is not known. Hence, though the group company has declared dividend, calculation of cost of equity exclusively for this unit will have no meaning.

8.6.7 COST OF RETAINED EARNINGS

There is a mistaken view to treat retained earnings as cost free. The firm is required to earn on the retained earnings also at least equal to the rate that would have been earned by the shareholders if they were distributed to them. This is the cost of retained earnings.

The opportunity cost of retained earnings to the shareholders is the rate of return that they can obtain by investing the after tax dividends in alternative opportunities of equal quality. After making due provision for any tax on capital gains from the after tax dividends, the cost of retained earnings can be expressed as

\[
\frac{(1 - Ti) D}{(1 - Tc) P}
\]

where \( Ti \) is the marginal income tax rate, \( Tc \) is the capital gains, \( D \), the dividend rate and \( P \) the market price of the shares.
In a public limited company, there are more number of share-holders of various means and incomes and therefore there can hardly be a single tax rate that would correctly reflect the opportunity cost of retained earnings to every shareholder. Hence, the management has to exercise its judgment in selecting the marginal tax of 'typical' shareholder which is obviously not an easy task.\textsuperscript{17}.

Determination of cost of retained earnings also is a difficult job for the sample units. This is because, as two units are government undertakings, no shares are held by the public. In the case of other two units, shares are held by many shareholders. As typical shareholders with marginal tax rates are not known, in this case also, the cost of retained earnings can not be meaningfully calculated.

8.6.8 COST OF DEBT

Every kind of debt carries a certain rate of interest. The effective cost of debt is the tax adjusted rate of interest. It can be calculated by the formula $K=(1-T)R$, where $K$ is the cost of debt capital, $T$ is the marginal tax rate and $R$ is the contractual interest rate. Because of the tax deductibility of interest, it is customary to compute the cost of borrowed funds as an after tax effective rate of interest.
Debt may be either perpetual or redeemable after certain period. When calculating the cost of redeemable debt, account has to be taken, in addition to interest payments, of the repayment of the principal. The principal may be repaid in one lumpsum or in installments.

The calculation of the cost of debt also poses difficult problem for this industry. Because, due to difficult performance of this industry, the debt capital is varying frequently. Also there are delayed payments of installments.

8.6.9. WEIGHTED COST OF CAPITAL OF THE SAMPLE UNITS

As already mentioned, cost of capital refers to the minimum rate of return expected on the investment. If the investment is made from the debt capital, the minimum rate of return on the investment must be at lease to pay for the interest on the borrowed funds. On the otherhand, if the investment is made from the own funds, what is the minimum rate of return expected on the investment can not be easily determined as it depends upon the policy of the management regarding the return on their investment. Under these circumstances, it may be justified to get a minimum return which will be equal to the bank lending rate. This is what the various units consider as the weighted cost of capital of their units.
8.7 LONG-TERM INVESTMENT DECISIONS (CAPITAL BUDGETING)

8.7.1. INVESTMENT DECISIONS

The allocation of funds is an important function of financial management. It is also referred to as 'investment decisions'. There are two kinds of investment decisions, viz, long-term (capital budgeting) and short-term (working capital management). This section deals with capital budgeting and the next section deals with working capital management.

8.7.2. CAPITAL BUDGETING

Capital budgeting decision involves a current outlay or a series of outlays of cash resources in return for an anticipated flow of future benefits. These benefits may be either in the form of increased revenue or reduction in cost.

8.7.3 DIFFICULTIES IN CAPITAL BUDGETING DECISIONS

Capital budgeting decisions are of paramount importance in financial decision making. But they are very difficult to make because of the following facts:

(a) the benefits from investments are received in some future period, where future is uncertain and involves risk;
(b) the costs incurred and benefits received from the investment occur in different time periods. They are not easily and logically comparable because of the time value of money;

(c) it is not often possible to calculate in strictly quantitative terms all the benefits or the costs relating to a particular investment decision.

8.7.4 USE OF CAPITAL BUDGETING TECHNIQUES IN THE INDUSTRY

Though there are many capital budgeting techniques such as pay-back period, internal rate of return (IRR), average rate of return (ARR), discounted cash flow (DCF), net present value (NPV), etc., none of these techniques is used in the industry to make long term investment decisions.

The financial executives and chief executives of the sample units stated that they make investments in capital assets which are very essential for the normal operations of their units. They opine that investment decisions could not be made scientifically due to scarcity of funds, poor investment opportunities, difficulty in determining accurately the benefits of the investment, etc.

Even though the same difficulties are experienced by all the financial executives, one financial executive stated that if at all they use any technique in deciding investments, it is only pay-back period method.
Even here, the technique is used only when the investment options are not very essential for the normal operations of the firm. For instance, this unit wanted to invest Rs. 10 lakhs in capital asset. The opportunities were to buy either a tanker (to bring furnace oil to the company site) or a truck (to bring raw magnesite from mines to factory site). As these two assets were not very much essential for the regular operations, they decided to invest only in the truck as it had a lesser pay-back period than the tanker.

When one of the options is very essential than the other, they go for the investment on the basis of essentiality even though it has a longer pay-back period than the other options. For instance, once the unit had to decide about an investment of Rs. 10 lakhs either to replace a crusher (to be used in the production floor) or a truck. It determined the pay-back periods for the two proposals and it was lesser for the truck than the crusher. Even then, the unit decided to invest only in the crusher as it was very essential than the truck. Thus essentially alone plays a vital role in deciding the investment proposals in this industry and next to it is the availability of funds.
8.8 **SHORT-TERM INVESTMENT DECISIONS**  
(WORKING CAPITAL MANAGEMENT)

Short-term investment decision is similar to the long-term decision making process because both entail an analysis of the effect of risk and profitability. Working capital management is concerned with the problems that arise in attempting to manage the current liabilities and the inter-relationships that exist between them.

8.8.1 **OBJECTIVE OF WORKING CAPITAL MANAGEMENT**

One notable feature of short-term assets is the question of profitability vs. liquidity and the related aspect of risk. If the size of such asset is large, the liquidity position would improve but profitability would be adversely affected as funds will remain idle. Working capital management should, therefore, aim at striking a balance such that there is an optimum amount of short-term assets.

8.8.2 **CONCEPTS OF WORKING CAPITAL**

There are two concepts of working capital: gross and net. The term gross working capital (also referred to as working capital) means the total current assets. The term net working capital (NWC) is defined as the difference between current assets and current liabilities. This section
deals with NWC as it is commonly used in practice and is more important than the concept of gross working capital.

The current assets should be large enough to cover the firm's current liabilities in order to ensure a reasonable margin of safety. Hence current assets and current liabilities decisions must be made in light of the overall valuation of the firm.\textsuperscript{19}.

8.8.3 MAGNITUDE OF WORKING CAPITAL

Efficient working capital management requires that firms should operate with some amount of NWC, the exact amount varying from firm to firm and depending upon the nature of the industry. The magnitude of working capital required will not be constant but will fluctuate. To carry on business, a certain minimum level of working capital is necessary on a continuous and uninterrupted basis. This part may be called permanent or fixed working capital.

Over and above this permanent working capital some investment is needed to meet fluctuations in demand consequent upon changes in production and sales as a result of seasonal changes. This part may be called temporary or variable working capital.
8.8.5 STATUS OF WORKING CAPITAL OF THE STUDY UNITS

The study units have not clearly drawn a line to separate the permanent and temporary working capital requirements. The financial executives of these units are of the opinion that the whole of the working capital is permanent in nature because, the demand for their products is steady and hence production schedule is steady.

The working capital of three of the sample units are given in Appendix 8.2. The other unit, being a member of a large group could not provide data for working capital. However, the financial executive of this unit said that their net working capital was around Rs. 2 crores.

Appendix 8.2. reveals that the working capital of sample units fluctuate widely over the period. In fact unit-I had more current liabilities than current assets resulting in a negative net working capital, which is not desirable. This is because of following the directions of the government, being a government undertaking. Though unit-II does not have negative net working capital, it is heavily increasing during the last stage of the study. Unit III has tried to reduce its net working capital which is a desirable situation. The financial executives attribute the fluctuations to the change in the policy of the financial institutions on short term credits. Had the
financial institutions a steady policy on short-term credits the units might have maintained their working capital steadily and favorably.

8.8.4 FACTORS INFLUENCING THE WORKING CAPITAL OF THE INDUSTRY

An analysis of the working capital requirements of the sample units reveal that it is influenced by the following factors:

(i) NATURE OF BUSINESS: The Indian magnesite industry is a mining and labour oriented one. As a result the working capital requirement is sufficiently high to pay for the labour and meet the mining and production operations.

(ii) PRODUCTION CYCLE: The production cycle beginning from mining and ending with conversion into usable product takes nearly 15 to 20 days. Hence to meet the expenses during this period, high working capital is required.

(iii) BUSINESS CYCLE: The demand for processed magnesite is continuous and steady. Hence its working capital is almost the same throughout the year except for unprecedented happenings.

(iv) PRODUCTION POLICY: Usually there is no change in the production policies of the units as neither the
demand for their products is seasonal nor the requirement of major input, namely, raw magnesite is seasonal. As a result there will be no change in the working capital requirements throughout the year.

(v) CREDIT POLICY: Credit policy influence the requirements of working capital in two ways: (i) through credit terms granted by the firm to its customers, and (ii) credit terms available to the firm from its suppliers. The firms grant one month credit for their customers. The suppliers also grant one month credit for their supplies. However, the problem experienced is in collecting accounts receivables. This results in an increase of working capital requirements.

(vi) GROWTH AND EXPANSION: When a company grows, logically, it needs large working capital. All the units of the industry are growing concerns. For instance, one unit has started a brequetting plant to make effective use of magnesite chips. Another unit is working on a beneficia- tion plant. Other units are also engaged in mechanisation and expansion activities. Hence, the working capital requirements of these units are on the increase.

(vii) AVAILABILITY OF MATERIALS: There are some materials which are very scarce, or the sources not known. To sustain smooth operation the firms are compelled to stock
them far in excess of genuine needs. In this industry, many of the spares and maintenance items fall in this category. Hence, the working capital requirements go up.

(viii) POLICY OF THE MANAGEMENT: The policy of the managements of these units also result in determining working capital requirements. For instance, in two units, the managements do not want to take risk and hence they maintain more current assets than current liabilities. One unit wants to have nearly the same amount of current assets as the current liabilities. In another unit, the current assets and current liabilities vary widely as its management has to consider external pressures.

(ix) OPERATING EFFICIENCY: Management can contribute to a sound working capital position through operating efficiency. Although management can not control the rise in prices, it can ensure the efficient utilisation of resources by eliminating waste, improving co-ordination and a fuller utilisation of existing resources. The managements of all the units are working on these lines for the efficient management of working capital.

The financial executives of these units state that each of these factors is given due consideration in deciding their working capital requirements efficiently.
8.9 RATIO ANALYSIS

Ratio analysis is the process of determining and interpreting numerical relationships based on financial statements. Every company ensures that its various financial proportions are kept healthy. Its business performance can be measured by the use of ratios.\textsuperscript{20}

Investors are interested in estimating earning capacity. Creditors are concerned with liquidity and ability to pay interest and the principal. Management is interested in evolving analytical tools that will measure costs, efficiency, liquidity, and profitability with a view to making intelligent decisions. Ratios help these persons to decide how the company stands in fulfilling their interests.

Many ratios can be calculated from the financial statements of a company. However, in this section, some important ratios for the sample units are calculated and an analysis is made to what extent they are applicable and used by the sample units.

In defining the components of ratios, many analysts have different views. However, in this report, the components which are commonly used by the industry are considered.
8.9.1. DEBT - EQUITY RATIO

The purpose of this ratio is to measure the relative share of outsiders and shareholders. It measures the soundness of long-term financial policies. Debt means long-term loans i.e. debentures and/or loans from financial institutions etc. Equity means shareholders' funds (i.e) equity shares, performance shares and retained earnings. The ratio is calculated by the following formula.

\[
\text{Debt Equity Ratio} = \frac{\text{Debt External Funds}}{\text{Equity Internal Equities}}.
\]

The generally accepted standard ratio of debt-equity is 2:1. The Table 8.1 gives the debt equity ratio of the sample units.

**TABLE 8.1 DEBT EQUITY RATIO**

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit I</th>
<th>Unit II</th>
<th>Unit III</th>
<th>Unit IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-82</td>
<td>0.54:1</td>
<td>NA</td>
<td>*</td>
<td>1.02:1</td>
</tr>
<tr>
<td>1982-83</td>
<td>0.40:1</td>
<td>NA</td>
<td>*</td>
<td>0.96:1</td>
</tr>
<tr>
<td>1983-84</td>
<td>0.50:1</td>
<td>NA</td>
<td>*</td>
<td>0.76:1</td>
</tr>
<tr>
<td>1984-85</td>
<td>0.78:1</td>
<td>4.09:1</td>
<td>0.53:1</td>
<td>1.05:1</td>
</tr>
<tr>
<td>1985-86</td>
<td>0.88:1</td>
<td>3.29:1</td>
<td>0.89:1</td>
<td>1.00:1</td>
</tr>
<tr>
<td>1986-87</td>
<td>0.89:1</td>
<td>3.17:1</td>
<td>0.63:1</td>
<td>1.02:1</td>
</tr>
<tr>
<td>1987-88</td>
<td>**</td>
<td>3.14:1</td>
<td>0.54:1</td>
<td>1.18:1</td>
</tr>
<tr>
<td>1988-89</td>
<td>1.35:1</td>
<td>2.51:1</td>
<td>0.42:1</td>
<td>0.99:1</td>
</tr>
<tr>
<td>1989-90</td>
<td>1.55:1</td>
<td>2.78:1</td>
<td>0.25:1</td>
<td>0.94:1</td>
</tr>
<tr>
<td>1990-91</td>
<td>1.72:1</td>
<td>2.99:1</td>
<td>0.14:1</td>
<td>0.77:1</td>
</tr>
</tbody>
</table>

**NB:** NA - Not Available
* - No Long Term Borrowings
** - Accounting Year Change
Table 8.1 reveals the following facts. Unit I had more own funds than the borrowed funds up to 1986-87 and there after the debt has risen than the own funds. As a result there is a favourable change in the debt-equity ratio of this unit.

Unit II is a member of a large group. The debt equity ratio of the group company has been improving over the past. The financial executive of this unit states that as they generally get funds from the management as and when required, the debt-equity ratio of this unit, if considered alone, would also be the same as that of the whole company. In the absence of correct data relating to this unit exclusively, the opinion of the financial executive has to be taken as such.

Unit III had no long-term borrowings during the first three years of the study period. Thereafter, their own funds were increasing than the borrowed funds resulting in an unfavorable debt-equity ratio. This is because it is a government understanding and it has to follow the directions of the government.

In the case of unit IV being a member of a large group, the debt equity ratio of the group company (as its financial executive opines) can be taken to be the same for this unit also, which shows that their own funds are more than the borrowed funds.
8.9.2 CURRENT RATIO

This ratio is a test of the ability of the firm to meet its short-term commitments in time. A current ratio of 2:1 is considered as ideal as a rule of thumb.\textsuperscript{21} Table 8.2 gives the current ratios of the sample units. It is determined by the following formula;

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

TABLE 8.2 CURRENT RATIOS

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit I</th>
<th>Unit II</th>
<th>Unit III</th>
<th>Unit IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-82</td>
<td>1.05:1</td>
<td>4.38:1</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>1982-83</td>
<td>1.11:1</td>
<td>4.14:1</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>1983-84</td>
<td>1.55:1</td>
<td>4.03:1</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>1984-85</td>
<td>0.84:1</td>
<td>2.52:1</td>
<td>2.21:1</td>
<td>--</td>
</tr>
<tr>
<td>1985-86</td>
<td>1.10:1</td>
<td>2.88:1</td>
<td>2.34:1</td>
<td>--</td>
</tr>
<tr>
<td>1986-87</td>
<td>2.62:1</td>
<td>2.34:1</td>
<td>1.84:6</td>
<td>--</td>
</tr>
<tr>
<td>1987-88</td>
<td>2.47:1</td>
<td>**</td>
<td>1.53:1</td>
<td>--</td>
</tr>
<tr>
<td>1988-89</td>
<td>1.08:1</td>
<td>2.32:1</td>
<td>1.12:1</td>
<td>--</td>
</tr>
<tr>
<td>1989-90</td>
<td>0.28:1</td>
<td>1.91:1</td>
<td>1.85:1</td>
<td>--</td>
</tr>
<tr>
<td>1990-91</td>
<td>0.29:1</td>
<td>1.89:1</td>
<td>2.89:1</td>
<td>--</td>
</tr>
</tbody>
</table>

Source: Records of respective units (unpublished)
NA - Not Available
** - Accounting Year Changed.

This table shows that there is no uniformity among the units in maintaining the standard current ratio. For instance, in Unit I, this ratio shows wide fluctuations. The financial executive of this unit attributes this fluctuation to the government policy on short term credits, as it is a government company.
In Unit II, this ratio was around 4:1 during the first four years of the study period and thereafter it has come down to around 2:1. This shows that this unit has taken steps to maintain the standard norm.

Unit III is almost following the standard current ratio. However, during the last two years, it shows an increasing trend.

As unit IV is a member of a large group of companies, figures of current assets and current liabilities of this unit are not available. But the financial executive of this unit states that they maintain the standard current ratio.

In general, in all the units, except one for the recent period, more current assets are maintained than current liabilities which implies that they would be able to meet their short-term obligations.

8.9.3 QUICK (ACID TEST) RATIO

The quick ratio tests the short-term liquidity of a firm. This ratio is a more severe and stringent test of a firm's ability to meet immediate obligations. To get liquid assets, items which are not liquid (ex. inventory, prepaid expenses, etc.) must be removed from current assets. The formula for quick ratio is as given below.

\[
\text{Quick Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}.
\]
A quick ratio of 1:1 has usually been considered favourable since for every rupee of current liability, there is a rupee of quick asset.\textsuperscript{22} The quick ratios of the study units are given in Table 8.3.

\textbf{TABLE 8.3 \ QUICK RATIOS}

\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{Year} & \textbf{Unit I} & \textbf{Unit II} & \textbf{Unit III} & \textbf{Unit IV} \\
\hline
1981-82 & 0.79:1 & 3.00:1 & NA & -- \\
1982-83 & 0.84:1 & 2.47:1 & NA & -- \\
1983-84 & 1.18:1 & 2.14:1 & NA & -- \\
1984-85 & 0.67:1 & 1.48:1 & 0.88:1 & -- \\
1985-86 & 0.44:1 & 1.88:1 & 0.72:1 & -- \\
1986-87 & 1.99:1 & 1.40:1 & 0.99:1 & -- \\
1987-88 & 1.66:1 & ** & 0.83:1 & -- \\
1988-89 & 0.76:1 & 1.27:1 & 0.93:1 & -- \\
1989-90 & 0.17:1 & 0.92:1 & 1.12:1 & -- \\
1990-91 & 0.21:1 & 1.08:1 & 1.85:1 & -- \\
\hline
\end{tabular}

Source: Records of respective units (unpublished)
NA - Not Available
** - Accounting Year Changed.

A review of the table shows that Unit I has a fluctuating quick ratio. Unit II has tried to maintain the normal standard of quick ratio. Unit III has come nearer the normal standard, however, it has increased during the last year of the study. Data for unit IV relating to quick ratio are not available. However, the financial executive of this unit states that they are able to meet all their current obligations.

In general, this table reveals that all the units except one are almost prepared to meet their current obliga-
tions immediately. The other unit which has a fluctuating quick ratio has been forced to that position due to external pressures.

8.9.4 OVERALL PROFITABILITY RATIO

The overall profitability ratio is a good measure of the efficiency of the firm as a whole. It acts as a pointer to the management showing the progress or fall in the earning capacity of the business.

It is an extension of input-out analysis. This is also known as return on investment (ROI) or return on capital employed ratio. This ratio is expressed as a percentage and calculated by the following formula.

\[
\text{Overall Profitability} = \frac{\text{Operating profit}}{\text{Capital Employed}} \times 100
\]

Though various opinions are available to define operating profit and capital employed, these terms are used in this report as used by the sample units and are as given below.

Operating profit = the business profit before interest and taxation

Capital employed = Net fixed assets + Net working capital

The ratios of return on capital employed of the sample units are given in Table 8.4.(on the next page).
Table 8.4 reveals that the return on investment ratios of unit I ranges from 22% to 35% except for the years during which it earned losses and the years in which it had negative capital employed. In unit II this ratio fluctuates due to the fluctuations in the overall profits of the company. In unit III this ratio increases except for slight variations during some years. This ratio could not be calculated for unit IV due to non-availability of relevant data.

The ROI ratios of the sample units do not give a clear picture about the overall performance of the companies. This is due to the policy of the management concerned and the situation in which each unit is functioning.
8.9.5 NET PROFIT RATIO

This ratio measures the success of the company in meeting the objective of realising profits from its sales. Higher this ratio, the better it is because it gives an idea of improved efficiency of the firm.

Net profit is arrived at after meeting all expenses of the firm from sales. The rise or fall in sales may be due to external factors over which the management may have little control. The management, however, must try to keep the other end, namely, the expenses, at least steady, if not reduce it, to maintain a steady net profits over the period. Net profit ratio, expressed as a percentage is obtained by the following formula.

\[
\text{Net Profit ratio} = \frac{\text{Net Profit after tax}}{\text{Net Sales}} \times 100
\]

Table 8.5 gives net profit ratios of the sample units.

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit I</th>
<th>Unit II</th>
<th>Unit III</th>
<th>Unit IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-82</td>
<td>7.97</td>
<td>12.98</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>1982-83</td>
<td>4.54</td>
<td>3.36</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>1983-84</td>
<td>-6.82</td>
<td>-26.51</td>
<td>7.42</td>
<td>--</td>
</tr>
<tr>
<td>1984-85</td>
<td>10.31</td>
<td>-2.19</td>
<td>12.23</td>
<td>--</td>
</tr>
<tr>
<td>1985-86</td>
<td>-5.39</td>
<td>3.03</td>
<td>16.78</td>
<td>--</td>
</tr>
<tr>
<td>1986-87</td>
<td>**</td>
<td>20.26</td>
<td>19.08</td>
<td>--</td>
</tr>
<tr>
<td>1987-88</td>
<td>-0.39</td>
<td>9.43</td>
<td>23.61</td>
<td>24.35</td>
</tr>
<tr>
<td>1988-89</td>
<td>-3.72</td>
<td>5.38</td>
<td>24.35</td>
<td>--</td>
</tr>
<tr>
<td>1989-90</td>
<td>-0.23</td>
<td>6.64</td>
<td>24.35</td>
<td>--</td>
</tr>
<tr>
<td>1990-91</td>
<td>**</td>
<td>NA</td>
<td>NA</td>
<td>--</td>
</tr>
</tbody>
</table>

Source: Records of respective units (unpublished)
NA - Not Available
** - Accounting Year Changed.
This table shows that the net profits earned by the units are not encouraging. The major reason attributed to this unsatisfactory profits is the rising costs of operations, especially fuel and labour costs.

8.9.6 INVENTORY TURNOVER OR STOCK TURNOVER OR STOCK VELOCITY RATIO

It is the relationship between the cost of goods sold during a given period and the average stock holding during that period. It is a valuable measure of marketing efficiency and inventory quality. It may be used to assess the stock utilisation. It assists the financial manager in evaluating inventory policy to avoid any danger of overstocking as a prelude to the effective utilisation of the resources of the firm. This ratio can be determined by the following formula:

\[
\text{Inventory Turnover} : \frac{\text{Cost of goods sold}}{\text{Average inventory}} \text{ times.}
\]

An inventory turnover ratio, as such, means absolutely, nothing, because there is no fixed norm for inventory turn-over which depends greatly on the sales policies followed by the firm. To give meaning to a turnover figure, it must be compared with such other figures of the same unit for different periods or with that of competitors. The inventory turnover ratios of the study units are given in Table 8.6 (on the next page).
TABLE 8.6
INVENTORY TURNOVER RATIOS

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit I</th>
<th>Unit II</th>
<th>Unit III</th>
<th>Unit IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-82</td>
<td>15.05</td>
<td>4.64</td>
<td>11.30</td>
<td>7.32</td>
</tr>
<tr>
<td>1982-83</td>
<td>13.63</td>
<td>4.76</td>
<td>10.87</td>
<td>8.21</td>
</tr>
<tr>
<td>1983-84</td>
<td>15.42</td>
<td>5.91</td>
<td>11.97</td>
<td>7.98</td>
</tr>
<tr>
<td>1984-85</td>
<td>3.38</td>
<td>6.79</td>
<td>12.01</td>
<td>7.97</td>
</tr>
<tr>
<td>1985-86</td>
<td>9.43</td>
<td>7.36</td>
<td>11.50</td>
<td>8.03</td>
</tr>
<tr>
<td>1986-87</td>
<td>13.89</td>
<td>7.83</td>
<td>12.45</td>
<td>8.86</td>
</tr>
<tr>
<td>1987-88</td>
<td>13.76</td>
<td>**</td>
<td>12.63</td>
<td>8.98</td>
</tr>
<tr>
<td>1988-89</td>
<td>13.14</td>
<td>11.27</td>
<td>12.77</td>
<td>9.32</td>
</tr>
<tr>
<td>1989-90</td>
<td>12.88</td>
<td>6.81</td>
<td>11.95</td>
<td>9.66</td>
</tr>
<tr>
<td>1990-91</td>
<td>13.06</td>
<td>6.59</td>
<td>13.32</td>
<td>9.84</td>
</tr>
</tbody>
</table>

Source: Annual Reports of units I and II.
: Records of Units III and IV (unpublished)
** - Accounting Year Changed.

An analysis of this table shows that inventory has turned-over 13 times in unit I, 7 times in unit II, 12 times in unit III, and 9 times in unit IV. Comparing the inventory turn-over of these units, unit I stands first, unit III stands second, unit IV stands third, and unit II stands in the fourth. This table further shows that each unit is taking steps to ensure better utilisation of the inventories by increasing their inventory turn-over ratios.

8.10 COSTING

The characteristic features of modern industry, especially large scale production, keen competition and complexity of production procedures, necessitate the production of goods at the lowest possible cost. Production efficiency is the tool of profit maximisation.24.
Having become cost conscious, every management is compelled to look for more and more detailed and day-to-day information relating to cost not only for ascertaining the actual cost of products, operations and departments but for control and reduction of cost as well. Cost accounting serves the needs of the management.

The costing aspect is taken care of in the Indian magnesite industry, in the following manner.

There is no separate costing department in any of the units. However, the costing function is taken care of by the finance department. The financial executives opined that a separate costing department was not required for their units due to the lesser volume of costing work, position of the industry in the industrial sector of the country, and perhaps the non-requirement of law for such a separate wing.

Process costing technique is adopted in this industry. There are two stages of production, namely (i) mining of raw magnesite, and (ii) conversion of raw magnesite into DBM/CCM etc.

Separate cost data for a period of one month are collected for these two processes. Preparation of cost sheet for a period of one month is made for the purpose of convenience and to help decision making.
The total cost of mining is arrived at by adding all the expenses relating to mining. Then it is divided by the number of tonnes of raw magnesite produced which gives the cost per tonne of raw magnesite.

Similarly, the total cost of conversion of raw magnesite into DBM etc is arrived at by adding all the expenses relating to conversion and when the total cost is divided by the number of tonnes of DBM/CCM etc produced gives the production cost of one tonne of DBM/CCM etc respectively.

One unit which manufactures refractory bricks also follows the same technique in arriving at the cost per tonne of refractory bricks. This is the third stage in the production of refractory bricks from magnesite.

The specimen cost sheet of one unit for a period of one month is given below:

COST SHEET OF UNIT I FOR THE MONTH OF MARCH 1991

Production of DBM : 2597.2 tonnes.

Cost details

<table>
<thead>
<tr>
<th>Direct Materials</th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw magnesite</td>
<td>33,75,253</td>
<td></td>
</tr>
<tr>
<td>Add Transport</td>
<td>77,986</td>
<td></td>
</tr>
<tr>
<td>Add Royalty</td>
<td>2,33,891</td>
<td>36,87,130</td>
</tr>
</tbody>
</table>
Direct Wages:
-------------
Crusher Operations 18,625
Kiln Operation 39,284 57,909

Direct Expenses:
----------------
LSHS Consumed 22,72,315
Furnace Oil 1,991
Fire bricks consumed 15,764
Staff Salaries 14,616
Other expenses: Kiln 4,716
Packing 996
---------
23,10,371
---------
Prime cost ....
60,55,410

Add Factory overheads:
----------------------
Power crusher operation 26,576
Kiln operation 96,924
Packing operation 28,139

Stores consumed: Crusher operation 27,338
Kiln operation 24,759
Packing operation 21,699

Depreciation: Crusher operation 32,637
Kiln operation 2,82,617
Packing operation 22,179

---------
5,62,868
---------
Works cost.....
66,18,278

Add Administration Overheads:
Salaries 1,38,789
Power 4,690
Stationery 25,686
Depreciation 1,52,021
Staff Salaries (Officers) 84,320
Other Expenses 1,87,223
Interest 2,39,583

---------
8,32,312
---------
Cost of production ...... 74,50,590
Add Selling and distribution expenses:

<table>
<thead>
<tr>
<th>Labour for packing</th>
<th>8,295</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Salaries</td>
<td>4,598</td>
</tr>
<tr>
<td>Gunny bags consumed</td>
<td>1,87,849</td>
</tr>
<tr>
<td>Packing and forwarding charges</td>
<td>26,754</td>
</tr>
</tbody>
</table>

\[ 2,27,496 \]

Cost of Sales 76,78,086

Cost of Sales: Rs. 76,78,086

DBM Production: 2597.2 tonnes.

Cost per tonne of DBM: Rs. 2956.29

NB: However, this cost has increased considerably over the period. During March '93, the cost of production of one tonne of DBM of this unit stood at Rs. 4550/-

8.11 INTERNAL AUDIT

The modern approach to financial management mainly concentrates on the efficient and judicious allocation of funds of the firm. All activities in an organisation involve money either directly or indirectly. Further, the use of funds takes place every day and through - out the organisation. To ensure efficient utilisation of funds, a constant check on all the activities is inevitable. This is what the internal auditing function is concerned with. But, in Indian magnesite industry, due to the nature and size of the units, a separate internal auditing department is not required. However, this aspect has been given due recog-
nition in all the units of the industry. In one of the units, there is a separate manager to look after the internal auditing aspect. In the case of three other units, there are no such separate personnel for this task. However, in these units also, there is an in-built arrangement established in the finance department for the performance of internal audit. Though this section is not consulted for routine decisions, before taking important decisions involving funds significantly, this section is consulted and its views are given serious thoughts.
REFERENCES


2. ibid, P. 11.

3. ibid, P. 15.


6. ibid, P. 517.

7. ibid, P. 473.

8. ibid, P. 517.


14. ibid, P.317.


22. ibid, P.373.
23. ibid, P. 376.