# Financial Management

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A MANAGEMENT GUIDE

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NATIONAL PRODUCTIVITY COUNCIL

# ABOUT NPC

The National Productivity Council is an autonomous organization registered as a Society. It is tripartite in its constitution and representatives of Government, employers, workers and various other interests participate in its working. Established in 1958, the Council conducts its activities in collaboration with institutions and organizations interested in the Productivity Drive. Besides its headquarters at New Delhi, NPC operates through eight Regional Directorates. In addition, there are 49 Local Productivity Councils.

The purpose of NPC is to stimulate productivity consciousness in the country and to provide service with a view to maximizing the utilization of available resources of men, machines, materials and power; to wage war against waste; and to help secure for the people of the country a better and higher standard of living. To this end, NPC collects and disseminates information about techniques and procedures of productivity. In collaboration with Local Productivity Councils and various institutions and organizations, it organizes and conducts training programmes for various levels of Management in the subjects of productivity. It has also organized an advisory service for industries to facilitate the introduction of productivity techniques.

Recognizing that for a more intensive productivity effort, the training and other activities of NPC, designed to acquaint management with productivity techniques, should be supported by demonstration of their validity and value in application, NPC offers a Productivity Survey and Implementation Service (PSIS) to industry. The demand for this service has been rapidly growing. This service is intended to assist industry adopt techniques of higher management and operational efficiency consistent with the economic and social aspirations of the community. PSIS is a highly competent consultancy service concerned with the investigation of management and operational practices and problems, and recommendation of measures of improvement and their implementation. NPC has established a special Fuel Efficiency Service. It has set up cells for servicing small scale industries. It has introduced a National Scheme of Supervisory Development under which an examination is held and certificates awarded to successful candidates. NPC also conducts a two-year practice-oriented programme for training in Industrial Engineering for first class graduates in Engineering disciplines.

NPC publications include pamphlets, manuals, and Reports of Productivity Teams. NPC utilizes audio-visual media of films, radio and exhibitions for propagating the concept and techniques of productivity. Through these media NPC seeks to carry the message of productivity and create an appropriate climate for increasing national productivity.

# MANAGEMENT GUIDE

# FINANCIAL MANAGEMENT

SHAHID PRAVIN

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#### PREFACE

The experience of the National Productivity Council (NPC) over the last ten years has shown that development of supervisory skills contributes significantly to the productivity of an organisation. In view of the rapid industrial developments that have taken place or are expected to take place in the ensuing years, the present arrangements for the supervisory training in India are altogether inadequate. NPC has launched a nation-wide Supervisory Development Scheme through self-study and enterprise level guidance which will prepare the candidates for a professional qualifying examination leading to the award of National Certificate in Supervision.

Apart from making the necessary arrangements for holding the above examination, and providing the specialist services for supervisory training under the usual terms, NPC is also preparing a number of guides covering the main body of the syllabus to be read along with standard textbooks on the subjects. The main purpose of these guides is to give the supervisors and foremen a basic understanding of the topics in a simple and concise manner so as to provide the basic foundations and promote future studies. A list of such guides and other booklets which are being brought out could be seen on the last page of the cover of this publication.

This guide on Financial Management has been prepared by Shri Shahid Pravia, Regional Director, NPC, Calcutta.

The list of reference books for further studies has been given in the prospectus of the National Certificate Examination in Supervision. It must be stressed here that all these guides are not intended as a substitute for enterprise level assistance for supervisory development in the way of training, demonstrations, seminars, etc., but mainly as an aid to these. It goes without saying that these publications will not only help the candidates preparing for the National Certificate Examinations but also others who wish to have some basic understanding of the subjects. It is hoped that managers of all forward looking enterprises will make an all-out effort towards training up their supervisors and workers.



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# MONEY IN THE BUSINESS

#### The Nature of Finance

In our money-using economy, finance may be defined as the provision of money at the time it is wanted. To everyone responsible for the provision of finance, it is a problem of recurring importance to so marshall his resources as to provide for a regular outflow of expenditure in the face of an irregular inflow of income. At times, we have the problem of meeting very large scale expenditure rather unexpectedly; at other times, we have large incomes with an accumulation of resources, which if not utilized in a profitable and fruitful manner for even temporary short term periods, may reflect in an adverse net yield on the total husbanding of our resources for a set period, say, an year. In the first period, if we may have to borrow money or raise it through other means, and in that process to the successful one must have some knowledge about the technicalities involved, the condition of the market and various other details. With surplus income, the problems are investments in general, their relative yields, the risks involved, the liquidity or the speed with which they can be disposed of when ready cash is again needed.

In the case of animals, and possible in the case of the lesser evolved among the human beings, the task of financing the next meal is done when the first meal is being digested. Even then, there are times when reserves have to be built up either in the form of excess fat to be consumed during period of hibernation or in the form of stored assets like nuts by squirrels. The provision of reserves, the type, the need and the manner are also problems of high finance.

In addition, there are goods and services which are consumed almost immediately. Some goods take long periods to be got ready for use, like buildings, plant and machinery, and sources have to be found to finance their construction for relatively longer periods without any corresponding return in the interval.

These assets are consumed over a long period of time, some like land may not be consumed at all though it took quite some amount of money to acquire it in the first place. The land may even appreciate in value. For the use of resources expendable over a longer period of time, methods must be devised to provide for their use in the cost of production and scale. This we call depreciation. At the same time, provision must also be made to provide sufficient funds to replace these when

they are worn out, and the cost at such time may well be many times more than the original cost. This involves the principles of revaluation and replacement reserves.

#### The Provision of Finance

In the country as a whole, small units predominated over the big ones. This is also true of England and several other countries of the world. In the case of the small entrepreneur, finance must be secured on one's own integrity. The man who has the greatest trust in his ability is himself, and for that reason a major part of the finance for such enterprise must come from one's own resources. This accumulation of resources must take place out of one's profits. In the case of the large firms as well as the smaller ones, the ploughing back of the profits is the first means to finance a business, to pay for its expansion and to put into use additional resources to satisfy the economic needs of the growing number of people. In this task, the high rate of taxation is a dis-incentive which has been talked about much. It is no doubt exists, as otherwise the need for such specialised agencies like the Small Scale Industries Finance Corporations at the State and Central levels, the Investment Finance Corporations for the larger enterprises and the world agencies over and above all these, would not have been felt as keenly as it is today. The sources of internal and external finance are so closely inter-related to the capacity to save at individual and corporate levels, that we need at some moment or other seriously consider about the levels of taxation prevailing not in our own coutry alone but in all parts of the world. These high levels of taxation are in turn brought about by failings at individual, corporate and Government levels, the mutual distrust and suspicion between communities and the absence of agencies to provide for basic amenities out of selffinancing enterprises, and the utter disregard for the need of a self-imposed limitation on the distribution of the fruits of enterprise between the state, the community and the individual.

From the above reasoning, we must, at one time or the other, come to the conclusion that to avoid the recurring phenomena of financial crises, which are in turn tried to be remedied by increasing interest rates to offer incentives for saving thereby increasing the interest rates for borrowings at the same time, profits or savings used for further expansion should not attract tax. This is one of the least exacting of sacrifices that a state can be expected to make to sustain the growth of economy so essential to support the needs of a growing population. It must also be recognized that in a time of rapidly rising prices, a businessman must be prepared to plough back into his business a large part of his profits to maintain his real capital ntact and any increase in direct taxation reduce his available profits, let alone the fall in the purchasing power of his money in general.

Other tools available to a businessman in the matter of internal source of finance are in the husbanding of the liquid resources, that is, his current assets, their relationships with the fixed assets, the proportion of his debtors outstandings, at any

one time in relation to his turnover, the creditors and the rapid movement of his stock. In the manipulation of these resources, one must aim at a ressonably balanced point of view.

As a source of external finance for business, the joint stock company is an institution which has gained universal acceptance and that too to a remarkable extent in all parts of the world including India. In this process, the concept of limited liability is the most important point. Partnership or shareholding in an unlimited company can wipe out the entire fortune of an individual in the event of bankruptcy of the businese, while with limited liability one can safely spread his investment in the form of small holdings in several companies. It also affords an opportunity to small investors of contributing to the economic growth of the community in a more direct manner, instead of their having to deposit money in the bank and the bank investing the funds for the financing of industry and trade. The shares as such are marketable and in addition can be utilized for raising further finance as security in support of loans or advances. The vast majority of joint stock companies belong to the category of private companies, a form of organization limited to fifty shareholders enjoying less irksome regulations as opposed to the public companies where possible number of shareholders are only limited by the total authorized capital divided by the nominal amount of each share. The public company is the obvious choice where large sums of money have to be raised, but the regulations governing their conduct are so designed as to afford the maximum protection for the safeguarding of the interest of the public.

Finance from the public can be raised either by the issue of shares or debentures. Share participation carries the element of risk in regard to profits and this to a great extent is minimized by issuing preference shares with stipulated rates of dividend. Debentures are loan capital which carry a fixed interest rate redeemable at the expiry of a fixed term where considered appropriate.

Where substantial amounts have to be raised by way of additional share capital the obvious choice is by way of a public issue. Consent for such issue has to be obtained from the Government. A detailed prospectus in support of the issue has to be filed with the Registrar of Companies. Where stock exchange listing is desired, the issue has to conform to the regulations laid down by the stock exchange committee and, where necessary, the alterations to the Articles of Association have to be made removing particularly any restrictions in regard to transfer of shares. An abridged version of the prospectus is generally advertised in the press and the issue can be underwritten through brokers or other financial institutions.

In several cases, fresh issues of capital can be placed with brokers and other financial institutions without having the necessity to go through the stock exchange.

option to existing shareholders to subscribe for fresh issues is another conventional method for raising additional capital. Capital issues in the recent past have met with considerable success, in spite of the disincentives operating against accumulation of private savings. The lack of individual savings have been offset by the support extended by institutional investors.

Temporary advances and even long term loans can be negotiated with Banks and for several of the industries, finance is available from investment corporations set up by State and Central Governments and other world organizations. For the latter category of finance, the importance of the industry to the economy of the country is the deciding factor, and though such advances generally take a longer period to materialize the terms offered are sometimes easier than those of the private agencies. Prior to the operation of exchange control restrictions, it was a normal practice for finance to be raised for several worthwhile projects in different parts of the world at one of the world centres of finance like London or New York, but such international issues are today rare.

Mergers and amelgamations with larger groups have been another source of augmenting the sources of finance for several enterprises in the post-war era. Greater operating economies have been made possible by such means; the possibilities for abuse lie in the creation of monopolies and injustice to minority shareholders. Finance in kind is another method of temporarily raising resources for putting these to use. This method of hiring capital goods and even services has acquired greater significance in the recent past and extends to transport, catering or canteen facilities, plant and machinery and even total factory and building facilities.

#### Risks of Finance

From the point of view of the investor there are three primary risks attached to an enterprise. These are the physical, the technical and the economic risks. Physical risks are those created by accidents like fire, flood, storm and theft, and the operation of natural laws, deterioration through the passage of time, breakages and destruction. Technical risks are those in which the plans do not materialize either due to deficiencies in the planning itself or for reasons completely unvisualized, the cost of production exceeds the sale price, and lack of experience and know-how and thousands of other reasons which make the fruits of industry go unrewarded. Robinson Crusoe's Canoe is a classic example of one of those wasted efforts.

Economic risks in modern business are of much greater significance than either physical or technical risks. They are of two kinds: firstly, inadequacy of resources to make a product and, secondly, the risk of a fall in the demand for the product In a controlled economy, the risk of a material required for production not being available can indeed be a serious one, because either a thing is available or it is altogether unobtainable. In a free market, even relatively scarce materials can be obtained for a price, and the choice is limited only by the additional costs you may be prepared to incur. The risk of the fall in demand has been almost a recurring feature and this periodic decline is generally described as "trade cycle" when demands for almost all conceivable type of goods falls much below the usual level.

The shortfall in the demand for a commodity can be the result of an incorrect estimate of the total demand or its duration. It may, as well, in the case of a new product, be the result of an incorrect appraisal of the requirements or taste of the consuming public, for example, fashion goods or a particular styling in the case of an automobile.

The next most important cause of the failure of a product gaining its estimated demand is its connection with another product which happens to be in short supply, e.g., automobiles run on petrol when petrol is in short supply or electrical appliances in the face of a power shortage. Competition from substitutes or rival products is another cause, while the durability and price of a product can be deterrents in its repetitive sale.

Avoidance of risks is possible in three ways, firstly, by incurring additional expenditure to mitigate the causes which bring about the risk, secondly, pooling the resources of several to distribute the incidence to a regular stipulated contribution, and thirdly, offsetting them with dissimilar risks. Additional expenditure on market research and stocking of essential raw materials can be safeguards provided one can reasonably estimate the loss likely to be incurred in the absence of such a provision. Insurance against risks by pooling of resources can be availed of in a large category of cases from the breaking of window panes, losses in transit, fire, burglary and loss of profits.

A risk to be insurable must be a separate and independent risk and not affected by a major accident which will make the pooling of risks impossible. In addition, the fact that the risks has been insured should not make the occurrence of the risk proportionately higher. Insurance should not act as an inducement to disregard the normal safeguards, care and prevention.

Pooling of risks of a dissimilar nature is what is generally done in the case of "hedges" on the commodity exchanges. Contracts are entered into for future delivery of produce or commodities at prices stipulated at the time of contracting so as to avoid the possibility of risks arising out of the fluctuations in price.

#### Gearing Ratios

In the companies where the element of risk in regard to return on investments is negligible, certain parts of the shareholdings are issued with a preferential dividend. This preferential dividend is fixed at a certain percentage slightly higher than the interest rates on gilt edged securities. The ratio of the annual amount payable on preference shares and other prior charges to the expected annual distributable profits is called the capital gearing or the Gearing Ratio. The following are two simple examples of a low-geared and a high-geared capital structure:

# Low-geared Company

Ca	pital	Tota	l Dividend
1.00.000	5% Preference shares of Re 1 each	Rs.	5,000
10,00,000	Ordinary shares of Re 1 each	Rs.	95,000
		Rs.	,00,000

#### Gearing Ratio: 1 to 20

#### High-geared Company

Ca	pital	Total Dividend
10,00,000 1,00,000	5% Preference shares of Re 1 each Ordinary shares of Re 1 each	Rs. 50,000 Rs. 50,000
		Rs. 1,00,000

#### Gearing Ratio: 1 to 2

High gearing is adopted with a view to increasing the yield on ordinary shares but at the same time it enhances the risk on the return. The par value of a share is fixed at the time of its issue, but its market value is dependent on the potentialities for dividend.

#### Fluctuations in the Value of Assets

Fluctuations in the value of assets have a greate bearing on the profits of an enterprise and also on its capital position. This can be proved by a simple example.

#### Profit and Loss Account

To Opening Stock ,, Purchases ,, Wages & Expenses ,, Profit	B/f	Rs,	50,000 60,000 30,000 20,000	By Sales ,, Stock c/f	Rs.	1,00,000 60,000
		Rs.	1,60,000		Rs.	1,60,000

#### Balance Sheet

Capital Profit	Rs. 1,20,000 20,000	Fixed Assets Current Assets	Rs. 80,000 60,000
	Rs. 1,40,000		Rs. 1,40,000
Pı	ofit & Loss Accor	unt	
To Opening Stock ,, Purchases	Rs. 50,000 60,000	By Sales ,, Stock c/f	Rs. 1,00,000 80,000
., Wages & Expenses ., Profit	30,000 40,009		
	Rs. 1,80,000		Rs. 1,80,000
	Balance Sheet		
Capita: Profit	Rs. 1,20,000 40,000	Fixed Assets Current Assets	Rs. 80,000 80,000
	Rs. 1,60,000	-	Rs. 1,60,000

The difference in the valuation on the stock items has completely altered the profit position, while an alteration in the value of the fixed assets would similarly affect the capital position. If the value of the assets is increased due to inflationary pressures and the enhanced profits are distributed, it would have, in fact, meant a depletion of the capital. Sound business economics dictate that there can be no real profits for a period unless the capital employed in the business at the beginning of the period has been maintained at its original value and purchasing power.

Depreciation of assets, which in fact represents the cost of using the assets in production, to reflect the true element of cost, must take into consideration the replacement value of the assets and the expected life of the assets. This seems to be logical when the principle of the last in first cut is increasingly being made use of in the pricing of stores to calculate the goods consumption on the argument that the selling prices are quoted on the basis of current prices prevailing and for that a true calculation of profit is only possible if prices as near to the current prices for the raw materials are taken into account. The fact that the principle of revaluation of assets is not generally adopted arises for two reasons: one, an incomplete understanding of

the theory in general and the accounting difficulties come across in its application, and, two, the non-acceptance of the principle by fiscal authorities in computing profits for tax. In regard to the first, methods have now been devised by several world corporations which simplify the application in accounts by creating revaluation reserve accounts to which are credited or debited the fluctuating values. These values are in turn computed by applying index numbers for different categories of assets which take into account the real value of money in relation to a base year. In regard to the second difficulty, some of the State Governments today accept the principle provided it is consistently applied from year to year so that no room for doubt exists in regard to the principle being misused as a convenient tool for the manipulation of profits for tax purposes.

#### Reserves

Creation adequate reserves against risks and contingencies, including the operation of trade cycles, is a prudent financial necessity. It also, in effect, augments the finances available for running the business in the sense the income distributed as dividend to shareholders is to that extent reduced. A close scrutiny of the fluctuations in the business fortunes can be a reasonable guide, provided the data are used in conjunction with statistical theories to predict with reasonable accuracy occurrences of favourable and unfavourable significance. Where finances available for expansion are such, by dispersal of both manufacturing and selling activities in a wider range of countries and products the damaging results in one situation or country could be offset by a favourable circumstance obtaining in another. These arc, however, problems which require considerable analysis and foresight in application, but the rewards are equally compensatory in the advantages to be gained.

#### Export Finaucing

Where a manufacturer has a vast export market the problem of financing his export trade can be solved by resorting to the discounting of his bills through banks. The credit risks involved can be covered through Government agencies. Letters of credit established by the buyer can provide ready finance to the seller. In the matter of foreign trade in general, exchange control and import restrictions have assumed great significance in the post-war world. These restrictive measures are in turn designed to conserve the foreign exchange resources and to protect local industries in the context of national interests, but the improvement of trade in general is dependent on the principle of freedom to buy and sell in the most advantageous markets. Possibly as a result of the operation of natural economic laws, grouping of nations within which free trade can become possible is becoming a practical reality and it may be reasonably safe to surmise that in the long run restrictive enactments will give way to greater freedom of organization and enterprise.

#### Suggested Reading

- Business Finance By F.W. Paish. Sir Isaac Pitman & Sons Ltd., Pitman House, Parker Street, Kingsway, London WC 2.
- Finance Overseu Trade By W.W. Synett (Pitman, 30 Shillings)
- An Application of Replacement Value Theory By A. Goudeket. The Journal of Accountancy (July 1960), 270, Madison Avenue. New York.

#### QUESTIONS

- 1. What are the sources of finance for a business?
- 2. What is the difference between a Public and a Private Limited Company?
- 3. What are the different categories of Shares issued by companies?
- 4. What is meant by Gearing Ratios?
- 5. What are the types of risks involved in a business and the methods of counteracting these risks?

# MANAGING THE MONEY

Many important factors require consideration in planning an industrial organization, for example, the acquisition of suitable premises, the plant and machinery, power supplies, facilities for expansion, the acquisition of an efficient management team, technical and supervisory personnel and an adequate workforce. In all these, to make the scheme a success and to continue in operation one must also ensure the profitable use of available financial facilities and when necessary to find the necessary additional funds or resources.

## Capital Structure

Planning the capital structure of a company can take place in any one of the following situations:

- 1. When a new business or industry is started
- 2. When it is growing and is in need of additional funds for expansion
- 3. Upon merger or consolidation with other existing business
- 4. Upon reorganization

# The Earnings Theory

Business is primarily meant for earning a profit. If you can form a reasonable estimate of the profits to be earned, it becomes easy to calculate the capitalization needed. If Rs. 1,00,000 is the annual estimated profit and 5% is the rate of profit reasonable for that industry and at that rate capital can be secured, the amount of capitalization can be calculated by multiplying the earning by a multiplier which is one hundred divided by the rate of yield, in this case 20. The capitalization will, therefore, be Rs. 20,00,000

# The Cost Theory

Under this approach, the capital requirement is calculated by ascertaining the amount required for fixed assets and to provide sufficient working capital. If the assets are not fully utilised the estimate of earnings will naturally fall and a stage may come when there is serious over-capitalization. The reverse is also a possibility, the capital invested may prove to be short of requirements or the rate of earning very high. In both the cases, capital reconstruction may be called for.

To arrive at a proper estimate of capital requirements one must be armed with a reasonably accurate estimate of sales, the production facilities required to produce the volume, the cost of production, the working capital required to finance for stock and debtors and the expenditure on distribution. No doubt these various costs will again be influenced by the appropriate policy decisions affecting production and marketing.

#### Over and Under-Capitalization

A company is over-capitalized when its earnings are not high enough to yield a fair return on the investment and the liabilities are in excess of the current value of assets. Under-capitalization exists when the rates of earnings are disproportionately high as compared to similar undertakings or when it has too little capital to carry on with the normal operations. The remedies for over-capitalization may require a reduction in capital, a procedure which has to follow the provisions laid down in the company law, and the most common method is to revalue the shares, e.g., a Rs. 20 share to be brought down to Rs. 10 share. In the case of under-capitalization with a disproportionately high rate of earning, the issue of bonus share is one convenient method to tide over the situations that the rate of earning per share goes down. When lack of finance is evident it has to be remedied by a fresh issue of shares.

# Relationship with Share Capital and Borrowings

In the case of a highly geared company the proportionate earning per equity share is lower than that of a company geared lower, and for that reason the financial policy must be so laid down that investment in equity offers inducement to the investing public. The major objective in regard to capital planning is to raise capital at the lowest possible cost either in terms of interest or dividend. For that reason it may be better to borrow when interest rates are lower than issuing shares. A company which uses borrowed capital along with its owned capital, is generally described as "trading on equity". In trading on equity gains and losses are magnified and this can be illustrated by the following example. If a company is able to make a 10% profit on capital employed and it is able to borrow money at 5% the additional 5% is a profit for the equity shareholders who make thereby 15% instead of 10% profit. On the contrary, if the income falls below 5%, the interest will have to be paid at 5% and the deficiency has, therefore, to be met out of the equity shareholders' income and correspondingly the rate of return falls lower.

In the following table we have a company which is able to make a profit of 10%, 15% and 3% in the first, second and third year of operations on the capital employed, i.e., Rs. 1,00,000. If it borrows an additional Rs. 1,00,000 the return on the equity will show a yield which illustrates best the situation explained earlier.

Capital issued Rs. 1,00,000	First year	Second year	Third year
Profit	Rs. 10,000	Rs. 15,000	Rs. 3,000
Per cent on 1,00,000 When Rs. 1,00,000 capital plus	10%	15%	3%
Rs. 1,00,000 borrowings at 5% interest are used in the business			
Profit	Rs. 20,000	Rs. 30,000	Rs. 6,000

Interest @ 5%	5,000	5,000	5,000
Net Income for Dividend	Rs. 51,000	Rs. 25,000	Rs. 1,000
Percentage for Dividend on Equity	15%	25%	1%

Where fluctuations in earnings are anticipated, caution must be exercised in regard to borrowings so that in lean years interest charges can be fully covered out of income.

One other limiting factor in regard to borrowing is that every fresh loan attracts a higher rate of interest because the risk on investment is correspondingly increased. For this a factor of safety of approximately 100% is generally recommended in regard to the ratio of the interest charge to the net income after payment of interest.

The points to be borne in mind in deciding a capital structure policy can be summarized as follows:

- 1. To provide capital at the lowest cost possible for the company
- 2. To have a conservative capital structure which will enable future issues of capital or loans attract investors
- 3. Avoidance of rigid commitments as a safeguard against lean income periods
- 4. Simplicity of understanding by the investing public
- 5. Retention of control
- 6. Economy in the formalities of raising the capital as such

The market conditions and the individual set up of the company as such will determine the method of issue; whether ordinary, preferred or deferred shares are called for, debentures, private loans or bank overdraft. In the upswing of a trade cycle, investors generally favour equity holdings or ordinary shares, while in its down-swing they buy preference shares or debentures which carry fixed rates of interest.

It will also be useful at this stage to generally comment on the advantages and disadvantages of the various combinations in the financial structure so that in evolving a suitable policy some guidelines available.

One class or ordinary shares as the primary means of providing capital offers the advantages of absence of fixed charges to endanger earnings in lean times, gives maximum freedom in financial management and policy formulations in affording opportunities without restriction to issue preference shares or raise loans on future occasions and the company runs no risks of magnifying losses in bad

periods through trading on equity. As against this it might be said that it is more expensive to raise capital that way, that it offers little inducement for increasing profits in prosperous times by trading on equity and for that reason those investors who look for capital appreciation will find little hope for realising their ends, and in the event of fresh issues of ordinary capital, unless these are purely rights issues, possibilities for dilution of control come in and in general the management may be charged with lacking in aggressiveness.

To have stocks distributed between preferred and ordinary broadens the market for the company's securities by catering to both the classes of investors, *i.e.*, those who look for security and those who look for greater yields, it enables the retention of control by holding the major part of the ordinary shares at the same time providing for adequate working capital, it is cheaper and easier to issue preference shares than entirely ordinary stock, and it offers the advantages of borrowed funds without having the need for repayment at a stipulated time. At the same time, it may also be said that loan capital can be raised cheaper. The major advantage in having a reasonable percentage of loan capital in addition to preferred and ordinary stock is the possibility to magnify gains by trading on equity and for maximum retention of control by an aggressive management. There is, however, some absence of freedom in regard to raising of future capital because subsequent loans may attract higher interest rates.

#### Basic Financial Policies

Apart from the capital structure policy, certain basic financial policies have to be laid down to assure the success of the operations on a continued basis. These would relate to the depreciation of assets, plant replacement, stock evalution, reserves and dividends, pricing policy and structure, insurance, pension schemes and the framework of financial administration in general.

#### Depreciation Policy

Depreciation provides for the loss in current use of assets, an estimation of the deterioration in its life, and above the repair and maintenance to keep the asset in income-producing level of efficiency. In effect this is done by providing an annual rate, which is included in the cost of production with a corresponding credit to a depreciation reserve account. To that extent it is earmarking of income for a specific purpose with the advantage that these funds remain with the business for further earning of income. If on the contrary, no depreciation is provided for, the capital would gradually become depleted with the increased dividends distributed during the course of the years.

There are several methods for calculation of his annual charge. The simplest methods is the straight line method which is arrived at by estimating the life of the

assets and dividing the total investment by this life period. The other method is the reducing balance method which is generally adopted by the fiscal authorities for computation of income for tax purposes. Under this, the life of the asset is estimated and also its residual value at the end of its useful life. A rate of annual depreciation is calculated on a percentage basis which would bring down the asset to its residual value at the end of the period. This can be calculated from the formula  $Rv = \frac{P(100-r)^n}{100}$ 

where Rv is the residual value, P the original cost of the asset, r the rate of depreciation and n the estimated life in number of years. The advantage claimed for the method is that in the initial stages when the amount of depreciation is high the repair and maintenance costs are low, while with the passage of time the annual depreciation charges decline to offset the increase in the repair and maintenance charges.

The provision of depreciation under either of the above methods does not guarantee that cash will be available at the end of the useful life of an asset for its replacement. This can, however, be done by investing an appropriate amount every year which with the accretion of interest earned would accumulate the required capital for replacement at the end of the estimated period. Normally, the cash retained in the business may, be utilised as working capital and it would be a matter of policy assessment as to which of the methods would be ultimately advantageous from the point of view of the business.

Apart from the normal deplection in the usefulness of an asset over a period of time, there arise circumstances under which it becomes essential to replace an asset in the interests of economy and competitive strength. This obsolescence cannot normally be provided by depreciation, and in those industries where the incidence is greater this can be taken care of by specific reserves.

In economics subject to pressures of inflation or deflation, accounting adjustments are considered prudent to reflect the true value of assets. On the same analogy, depreciation figures have to be adjusted to the fluctuations in the value of assets. In times of inflation by enhanced depreciation figures, the erosion of capital by way of distribution of dividends is avoided, while in times of deflation the reduction in depreciation affords opportunity to reduce prices and thereby sustain the demand for profitable industry. Several methods are available for the purpose, e.g., the revaluation method, the current value method and the renewals method. Under the revaluation method, assets are valued periodically and the asset accounts are adjusted to reflect these values, the corresponding contra entries being to the Revaluation Reserve Account. The depreciation is calculated on the revised value. Under the current value method, the asset is revalued at the end of each accounting period to reflect its current market value regardless of its depreciated value in the books, and the different is adjusted to the Depreciation Reserve Account. In the case of

rising prices, this method may prove to be extremely unreliable as adequate Depreciation Reserve are unlikely to be built up for the eventual replacement of the asset and the principle of charging a higher depreciation during such periods to conserve capital will hardly become practicable. This can, however, be remedied by additional appropriation of amounts in the Profit and Loss Accounts. Under the renewals method, revenue appropriation is made under a Renewals Reserve Account to provide for the renewal or replacement of the assets and when assets, are renewed the cost is debited to this account so that original historical cost of the plant continues to be maintained at the same level in the books of account. Both these methods, however, have intrinsic, defects and for that reason unless very overriding advantages in other directions exist, their adoption may not prove to be of advantage

#### Plant Replacement Policy

Apart from providing depreciation in the accounts, basic management policy should aim at replacement of assets to keep them in the most economic working efficiency. Towards this end, it may sometimes prove to be advantageous to relax the restrictions in regard to capital budget sanctioning by providing that departmental managers should have liberty to replace assets equivalent to a certain percentage of the annual depreciation charge. From the experience of a large world-wide corporation, where this percentage is 90% of the annual depreciation, the measure has enabled the company to maintain its assets fully modernised and thereby reap the maximum operating economies.

However, when plant and machinery have to be replaced the relative operaing economies will have to be gauged by calculating not only the financial advantages to be gained but also the appropriateness to purpose, accuracy of performance, reliability of operation, output, performance in relation to anticipated production requirements, servicing arrangements, availability of spares and requirements of specialised skill.

#### Stock Evaluation Policies

Two aspects are involved in a stock evaluation policy. The first aspect is in regard to charging to cost of production the value of materials consumed. The second is the valuation of the inventory at the close of an accounting period for the assessment of the profit. In regard to the charging to the cost of production the value of materials, several basic policies can be adopted. These are the actual cost on the basic of consumption where possible, the first in first out, the average method and the last in first out. The first in first out and the last in first out have economic reasoning behind them and, in fact, affect considerably the valuation of the inventory for assessment of a true profit position. The method of ascertaining the

actual cost has practical limitations in organizations of some size, while the average method has great practical utility behind it.

For assessment of profits for tax purposes and as general financial policy, the principle adopted for valuation of closing inventories is to adopt the actual cost or market price, whichever is lower. Where average prices are adopted the valuation is generally accepted for the annual accounts with a certificate to state that stock has been valued at cost or market price whichever is lower. In the case of the first in first out, the current production gets charged with the earliest cost, and if this is lower than the prevailing market price the profit disclosed may not reflect the true position. At the same time, the valuation of the stock, in a greater measure than any other method, approximates to the prevailing market price. In times of rising price levels this may, in effect, mean distribution of a greater profit than otherwise would be warranted by a valuation at cost or market price, whichever is lower.

The reverse of the case can happen with the last in first out method. The reasoning behind this method is that estimates of selling prices are generally made on the basis of current market prices prevailing for raw materials and, accordingly, the pricing methods adopted in costing must reflect as near a picture as possible to the current prices. However, in inventory evaluation in time of rising prices the earlier and, therefore, the lower prices are made use of. To that extent the profit disclosed as a result of stock valuation will be conservative.

For the above reason, in those organizations where conservative financial policies are in vogue with a view to conserving capital from depletion revaiuation reserves are created for stock items. The procedure in that case would be to arrive at group index figure for categories of materials and create reserves on the total stock held under each category. This can save a certain amount of accounting labour which otherwise would be necessary if individual prices are to be adjusted.

#### Reserves and Dividends

Creation of reserves is primarily guided by the need to conserve resources to ensure stability and financial strength and to finance expansion and new developments. Specific reserves for dividend equalisation, obsolescence of stock, contingency reserves to offset fluctuations as occasioned by trade cycles are other general categories of revenue reserves. Revenue reserves as distinct from capital reserves are available for distribution as dividends on a future occasion if the Board of Directors so decide. Capital reserves are not available for distribution as dividend through the Profit & Loss Account either due to the regulations of the Companies Act or by virtue of the nature or purpose for which these have been created. Share premiums, capital redemption reserves and other categories of capital reserves specifically created, e.g., realised capital profits from sale of assets, lease-hold redemption reserve

funds, debenture redemption funds, etc, belong to the category of capital reserves. These can, however, be distributed in the form of capital by issue of shares credited as fully paid up on going through the prescribed formalities.

It is quite possible to build up secret reserves by excessive depreciation of assets, the general gain in goodwill and market acceptance, but the tendency, however, through legislative enactments, is to prohibit the building up of large secret reserves.

Dividend limitation is widely canvassed as a measure to control inflationary trends brought in turn by spiralling wage demands. A general wage freeze combined with a limitation of dividend may act as one of the grestest incentives for industrial expansion, provided the built up reserves are utilised for new developments or growth, but the unfortunate experience has been that share-bids and take-overs have marred the logical culmination of a desired objective. In the policy making involved one must bear in mind almost the trusteeship function of the Board of Directors to preserve a balance between the claims of ownerships, employment and public welfare. Payment of dividend out of capital is prohibited, but when money is required for capital projects extending to a period, if the Articles of Association permit, resort can be made to payment of an interest on share capital with the appropriate sanction and the limiting factors imposed by legislation.

#### Pricing Policy

One of the most important functions affecting financial policy is the pricing of manufactured products, and for that reason the decision is generally arrived at after consultation with serveral departments. Apart from the cost, the overriding considerations are the potential demand, the break-even point, the profit margin necessary in terms of the broad economic policies of the organization as a whole to sustain its existence and growth, and the stability of the market. Financial considerations will also determine the marketing policies, whether the outlets should be through our distributing agencies or centres or normal trade channels, the promotional outlay and the priority in the matter of tapping, e.g., nation-wise, region-wise or locally.

Market research and other surveys by the marketing personnel may provide the basic guidelines, but to place absolute reliance on these may not prove to be a prudent procedure unless one applies one's own tests over the data. In those cases where selling prices are fixed by considerations other than cost plus profit, margin, the most readily saleable items may, in fact, bring the least amount of profit, and to that extent to advise on a practicable product mix may require tact as well as knowledge. In the case of new product with a potentially increasing market in the following year, it would prove to be of advantage in the long run to absorb a portion of the

promotional expenses during the subsequent period. To what extent deferred revenue expenditure would be regarded with favour in a published balance sheet is a matter which would require serious consideration, and where limitations exist the next best alternative may be a downright loss with explanations about hopeful anticipations.

Selling prices are to a great extent dependent on the credit allowed to distributors and dealers. The cost of financing such extended terms of credit may in some cases prove more difficult than an obvious price reduction, but decision of the nature to a very great extent will be determined by the extent of competition. Leadership in an industry may enable one manufacturer to reduce prices all of a sudden beyond economic levels considered by smaller units, but the question of survival would make it obligatory to fall in line and make subsequent readjustments or suffer partial or total eclipse.

#### Insurance

Good management is one of the best safeguards against business risks in general but to leave uncovered risks which may at one time or other upset completely its running, is inevitably bad management. Insurance against risks enables one to convert uncertain risks to a fixed annual charge, which by the very competitive nature of the insurance market is a negligible addition to overhead costs. It would be penny wise and pound foolish not to cover risks of fire, fidelity, workmen's compensation, loss of profits and third party liabilities, and in the case of export business the risks attendant on credits.

# Employee Retirement and Pension Schemes

Legislative enactments provide for separate administration by trustees or through Government agencies or Insurance Companies of funds earmarked for provident fund or pension benefits. Gratuity schemes are, however, not covered by such enactments and, consequently, the provision of finances for retirement benefits is a matter of policy which requires consideration. Yearly calculated allocations to a separate fund is the obvious choice, but it will be a matter for relative assessment as to whether the utility of such funds for the purpose of working capital is of overriding importance as against the possible element of risk involved in an unduly heavy commitment in one particular year. To the extent this is calculable, funds can be provided in advance, but simplicity in administration would make it a reasonably worthwhile proposition to cover it under an Insurance Policy.

#### Conclusion

In the case of a new enterprise, attempt at a broad financial policy is no doubt necessary, but practical considerations will make it necessary to let this grow

out of the emerging circumstances. In the case of companies established and growing, the setting down of a policy is vitally important, and in formulating one the considerations of continuity of operations, the need to set the pace for leadership and acceptance by the community of the social objectives of the enterprise will certainly provide the guidelines.

#### Suggested Reading

Financial Organisation and Management of Business By Charles W. Gestenberg. Prentice-Hall Inc., Englewood Cliffs, NJ.

Financial Aspects of Industrial Management By G.D. Bond. Butterworth & Co. (Publishers) Ltd., London.

#### QUESTIONS

- 1. What are the differnt methods adopted for Depreciation of Assets?
- 2. What are the different methods of Valuing Stock?
- 3. What are the cosiderations which influence the Capital Structure of a Company?
- 4. What are the specific reserves generally provided in company management?
- 5. What are the factors which influence pricing policies in an organization?

#### A SIMPLE APPROACH TO ACCOUNTING

#### The Slip System

It was a Scottish Banker who introduced the slip system of accounting in Japan. Japan adopts the chinese characters in writing. In China an average literate person needs learn something like seven thousand characters and to remember these one must practice calligraphy by writing assiduously thirty or forty characters every day. In Japan they have now reformed their writing to a very great extent. Bankers are required to close their books every day to send their returns to their Head Office. This Banker must have found this task very arduous, because of the time involved in making the vouchers, entering these in the day books and posting these to the ledgers. The innovation that he brought about was to prepare every voucher in the form of a journal voucher showing the debit and credit entries simultaneously on slips of paper serially numbered. If these are file in sequence the filed becomes a journal and every transaction is treated as a journal transaction, eliminating in that process the books of original entry. These slips can be sorted out daily according to the accounts involved and the ledger accounts can then be posted individually or in totals direct to the ledger accounts. This innovation saved considerable amount of laborious clerical work.

#### The Miroku Accounting System

Japanese is one of the worlds most competitive economies, with the result every month several companies become bankrupt. Business failures being such a frequent phenomena Dr. Urabe of the Kobe University wrote a best seller on the subject

Mr. Masayasu Suzuki, a philosopher, now in his seventies, became concerned with this large number of business bankruptcies. On studying the subject he discovered that these failures took place because the owners were not aware of their financial position in time. The closing of accounts normally took anything between three to six months and by the time they became aware of the profit or loss of this earlier period they had already become bankrupt, and could not pay their bills.

Mr. Suzuki went into the subject of accounting and discovered that the most laborious part of a book-keeper's job is to post the accounts and close the books. He came forth with a uniquely simple solution which eliminated the posting and speeded up the closing. He gave to the system the name Miroku Accounting, which is a one writing system.

Miroku is the Japanese equivalent of the Sanskrit word Maitreya. The concept of Maitreya Budha or the deity incarnating from time to time to solve the worlds ills gives to civilization a sense of direction. He wanted such an excellent word to describe the system. Mr. Suzuki formed a charitable or non-profit making organization called the Miroku Accounting Association to propagate his ideas. This Association now employs over two hundred consultants with ten offices in Japan. Thirty thousand companies are members of this association who officially use the system. Several thousands more use it un-officially. The finances for the association come primarily from the profits of a printing company which it owns, which provides the forms, the folders and other requisite stationery to run the system. The association also has an electronic data processing division for the use of its members, and training centres to train book-keeping clerks, mostly girls in Japan.

#### The System

The concept of accounting and the presentation of accounting information can be represented in the following diagram.

Assets	Liabilities		
Code Nos 1000—1999 or 100 to 199 Green	Code Nos 2000—2999 or 200— <b>299</b> Red		
Expenses  Code Nos 3000—3999 or 300 to 399 Yellow	Income  Code Nos 4000—4999 or 400 499  Blue		

All assets are normally debit balances and these are shown on the left hand side or debit side. All liabilities are credit balances, these appear on the right. Expenses are debit balances and Income, credit balances and these appear accordingly in the final statemer

In the British way of presentation, however, in the Balance Sheet Liabilities appear on the left, the assets appear on the right, for what reason we do not know now.

The top half of the statement is the Balance Sheet, the bottom half the Profit and Loss Account.

A system of numbering the accounts is used, to avoid errors in posting. Code number 100 to 199 or 1000 to 1999 represent asset accounts. The numbers of accounts operated will determine the number of digits to be used for this numerical classifications. Liabilities have codes 2000 to 2999, Expenses 3000 to 3999 and Income 4000 to 4999. The trial balance itself is in the form of the final reporting statement, the ledger accounts are also arranged in the same sequences and, therefore, no marshalling of accounts becomes necessary.

To make the system foolproof, to avoid errors in accounting even by untrained girls, a colour scheme is used, a combination of any four colours. For example Green for assets, Red for liabilities, Yellow for expenses. Blue for income. The ledger or ledger binders are of these colours, and also the corresponding vouchers. The codes spell for accuracy, if you fail on that the colours disparity highlights attention, unless of course you are colour blind.

#### The Vouchers

Every transaction is recorded on a voucher, on the unitary principle, that is the slip system, in the form of a journal voucher, showing simultaneously the debit and credit entries. These vouchers are strips of paper and on a form designed more or less like what is shown below. Modifications are possible

0	No.	Date	Dr. Code	Cr. Code	Details Salaries	D. Amt.	Cr. Amt.	Balance
0	115	31.1.69	325	186	Cash Salary of AB for Jan, 69	600.00	600.00	

These slips have one or two holes punched to file these vouchers in ring binders or paste them one below the other in the serial and date sequence. The first column shown the serial number of the voucher and the next column the date. Columns follow to show the code numbers of the debit and credit accounts. The details show the transaction. Salary for AB being paid by cash for January 69 amounting to Rs. 600. Columns to show the debit and credit amounts, and to indicate the balance when needed are provided.

These vouchers are made out in three or more copies according to the needs of the situation. In this particular case the original voucher is in white which is filed serially and forms the journal. These forms are printed with carbon coating on the back like the Airlines tickets. The second copy is Yellow in colour, the

colour code for expenses. The original voucher will not have carbon coating on its back for the column where the credit amount is indicated, and for the reason the debit amount alone is shown on this voucher against the salaries account.

The third copy is Green in colour, the colour code for Assets. The second copy of the voucher will have no carbon coating corresponding to the column where debit amount is shown so that on the third copy the credit amount alone will appear against the cash account.

Ledgers are in the form of loose-leaf ring binders, with or without transparent paper interleaving to keep the vouchers in position. These binders will be in the same colour as the account it represents. The second copy will be filed in the yellow binder for salaries account, code number 325. The third copy, the green voucher, will be filed in the cash account binder, code number 186 which is a green binder, the colour code for assets. In this process the posting work is eliminated. In one writing three vouchers are created, one for the journal eliminating the book of original entry, the other two vouchers to serve the purpose of posting to the corresponding debit and credit accounts. Where control accounts and subsidiary ledger accounts are to be operated additional number of copies can be made out to suit the situation.

#### Profit and Loss Account and Balance Sheet

At the end of the day the ledger accounts are balanced, that is the debit columns and the credit columns are added and on the last voucher the balance is shown in the balance column which forms the balance to be carried forward for the next day's balancing. These balances at the end of the day are transcribed on a preprinted form which forms the Balance Sheet and the Profit and Loss Account.

#### Balance Sheet

				Date		
Code No.	Assets Account	Amount	Code No.	Liabilities Account	Amount	
		Profit and L	oss Account			
	Expenses			Income ,		
Code	Account	Amount	Code	Account	Amount	
No.			No.			

This takes hardly ten minutes at the end of the day and the closing work is therefore, speeded up.

Companies of medium size are able to operate the entire system with hardly one or two girls, who produce daily a Balance Sheet and Profit and Loss Account without much effort. Adjustment entries for depreciation, accrued and prepaid expenses are made monthly on the same type of voucher forms to present monthly financial statements which are on similar forms.

The training of the clerks in the Associations school takes a few days or hours as against months or years required under the conventional methods for Book-keepers or accountants. Accountants in this process cease to be book-keepers. They become financial managers of the company, evaluating the financial consequences of management decision making on a day-to-day basis.

From the miroku or the One Writing System to computerization or electronic data processing is an effortless step. Even very small companies in Japan use such equipment for processing their accounting data. These vouchers or slips are sent to the service bureaus where these are processed and returned to the companies along with the tabulated statements. Trade Associations, Chambers of Commerce, Management Associations, Productivity Centres and Computer companies operate service bureaus at convenient locations to process company data and they are billed according to the time taken.

It was my privilege to meet Mr. Suzuki and his associates, particularly Mr. Shirakami on several occasions during my stay in Japan in July-August 1968 who gave me the opportunity to study the system in operation at several of their client companies, so that an account of the system could be published for the first time outside of Japan, and I thank them for this.

# Suggested Reading

No published literature in English language is available about the system at the moment.

# Questions

- 1. In what way does Slip System simplify accounting?
- 2. Draw up a Plan of Accounts for a company which will make the presentation of Final Accounts easy.
- 3. Describe the role of accountancy in evaluating the financial consequences of decision making in management.

#### UNDERSTANDING FINANCIAL STATEMENTS

#### General

Every management decision has a financial consquence. In terms of cost, those decisions are correct which tend to bring down costs ultimately and those decisions are incorrect which increase costs. There can be no better touchstone to evaluate management decisions than their financial consequences.

The language of finance is accounting, and if one must understand finance one must be able to read this language. To the uninitiated, financial statements may look confusing, but some efforts at their understanding will be rewarding to managers at all levels.

#### Percentage Analysis

Several people usually relate Materials, Labour and Overhead contents as a percentage of total cost and then add a percentage to cover the profit in the following manner:

Material		30
Labour		40
Overhead		30
Total cost	į,	100
Profit		20
Sales Revenue		120

It will be useful, as a first step in the utilization of percentage analysis to understand financial statements to express the same relationship as a percentage of Sales Revenue in the following manner:

Material	30	25
Labour	40	33
Overhead	30	25
Total cost	100	83
Profit	20	17
Sales Revenue	120	100

Absolute amounts are deceptive and unless one translates these amounts in their relationship with others the conclusions drawn may as well prove to be wrong.

One may raise a lot of hue and cry over an increase of Rs. 50,000 in postage or stationery, overlooking the fact that the turnover may have gone up by twice and the percentage of stationery cost may have appreciably gone down.

To avoid such misinterpretations and conclusions drawn therefrom, it will be helpful to relate all factors in the company to the income-producing activity *i.e.*, the net sales revenue. This will make it possible for all in the organization to speak one common language and express one's performance in terms of its relationship to this one objective. Comparisons between period to period, between activities and activities and/or departmental costs will become easier. A simple statement like the one below will speak more eloquently than a statement which gave the figures in absolute amounts:

	1962	1963
Net Sales	1 <b>00.</b> 0	100.0
Cost of Goods Sold	82.3	83.7
Gross Margin	17.7	16.3
Salaries	5.2	3.7
Wages	5 <b>.2</b>	5.4
Rent	2.0	1.9
Advertising	0.2	0.4
Other Expenses	3.3	2.9
Total Expenses	15.9	14.3
Net Profit	1.8	2.0

From the points of view of both, those who read statements and those who present information, it would be a good thing to have not too many figures on one statement. If facts are highlighted and statements are broken down into small stage by stage presentations on small sheets of papers, one's understanding of these statements becomes easier. Conclusions can be drawn effortlessly. Action based on these conclusions also becomes speedier.

#### Trend Analysis

In business, the capacity to predict situations is a vital need. According to the deterministic school of philosophy, past determines the present and the future. The exercise of free will can change situations. At the same time, it will be useful to know the trend of events based on the past. This trend is revealed in graphs which go under the name of trend graphs.

The monthly Sales Turnover or expenses when plotted on a sheet of graph paper is an erratic curve. If, on the contrary, a graph with moving annual totals is

drawn the line will show the trend of the situation. If the graph is extended to the future one can read from there, moving annual totals for the subsequent period in the light of past situations. From these totals by deducting the known eleven months stage by stage, one can read the month to month turnover results of expenses. A twelve-month moving annual total is a running total of twelve months experience, for example, total of Sales January 1962 to December 1962, February 1962 to January 1963, March 1962 to February 1963, etc. Moving annual totals can be prepared for twenty-four months period, thirty-six months period, or more. Such graphs prepared for varying periods are useful in determining the trend of emerging circumstances in the light of past experience.

#### Ratio Analysis

Financial statements like the Balance Sheet, Trading and Profit and Loss Account reveal the financial stability of a company. In reading such statements several ratios, if worked out, can give indications as to the credit worthiness, liquidity income earning capacity, operating efficiency and stability of an enterprise. There are several such ratios commonly made use of.

#### **Definitions of Terms**

In using ratio analysis, one must at the outset arrive at certain definitions for the terms that are used.

Current Assets Adam Smith in his book "The Wealth of Nations", published in 1776, defined "The goods of the merchant yield him no revenue or posit till he sells them for money, and the money yields him as little till it is again exchanged for goods. His capital is continuously going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit. Such capital, therefore, may very properly be called circulating capital." The term Current Assets in the words of Alexander Wall (How to Evaluate Financial Statements, Harper & Brothers) "are such assets as in the orderly and natural course of business move onward, through the various processes of production, distribution and payment for goods, until they become Cash or it equivalent, by which debets may be readily and immediately paid." Accordingly, these will include:

- 1. Cash on hand and in Bank
- 2. Government and other negotiable Securities
- 3. Accounts Receivable for the sale of good-
- 4. Bills Receivable
- 5. Stock, Raw materials, Work in Progress, Finished Goods
- 6. Advances

Fixed Assets: Fixed Assets are items not readily convertible into cash in the normal trading or manufacturing operations and will include:

- 1. Land
- 2. Buildings
- 3. Machinery, Tools and Equipment
- 4. Furniture and Fixtures
- 5. Trucks and Automobiles
- 6. Leasehold Improvements

Current Liabilities: All short term obligations generally due and payable within one year are described as Current Liabilities. These will include:

- 1. Notes payable to Banks
- 2. Notes payable and trade acceptances for merchandise, machinery or equipment
- 3. Accounts Payable
- 4. Loans Payable
- 5. Accruals
- 6. Deposits
- 7. Advance Payments
- 8. Reserves for Taxes
- 9. Dividends declared but not paid
- 10. Reserves for contingencies against possible losses
- 11. Current maturity of a funded debt

Net Worth: Net worth is the amount of funds invested at the risk of a business enterprise and consists of:

- 1. Preference Stock
- 2. Common or Ordinary Shares
- 3. Other Stock
- 4. Capital Surplus
- 5. Earned Surplus
- 6. Undivided Profits

The following statement will illustrate the more significant of these terms:

Assets	Rs. P.	
Cash	17,000.00	
Accounts Receivable	24,000.00	
Inventory	<b>6,00</b> 0.00	
Current Assets	47,000.00	

Fixed Assets	72,000.00		
Miscellaneous Receivables	6,000.00		
Prepaid Insurance	700.50		
Sundry Investments	300.00		
Total Assets	1,26,000.00		
Liabilities	Rs. P.		
Bills Payable	17,000.00		
Accounts Payable	8,000.00		
Accruais	is 5,000.00		
Due to Officers	5,000.00		
Current Liabilities	35,000.00		
Long Term Loans	17,000.00		
Total Liabilities	52,000.00		
Stock	63,000.00		
Earned Surplus	11,000.00		
Net Worth	74,000.00		
Total	1,26,000.00		
Net Working Capital Current Assets less Current Liabilities	12,000.00		

#### Current Assets to Current Liabilities

The ratio of current assets to current liabilities has come to be regarded by many analysts as an indicator of the credit-worthiness of an institution. In the last part of the nineteenth century, it became an accepted practice to look to this ratio. A ratio of two to one for Current Assets divided by Current Liabilities was considered to be satisfactory and deviations from this standard called for special scrutiny by Bankers and other lending institutions. However, to rely on this one index alone to the exclusion of others may not be considered to be an adequate scrutiny in the light of today's conditions.

#### Current Liabilities to Net Worth

This is one of the other ratios which has been used from long time by financial analysts. The current liabilities of a business have a close relationship with the seasonal fluctuations in the business, and for this reason it has come to be re-

cognised that it would be more logical for business to adopt its own natural business year for the purpose of its accounts. "The natural business year of a business enterprise is the period of 12 consecutive months that ends when the business activities of the concern have reached the lowest point in their annual cycles." (Roy A Foulke, *Practical Financial Statement Analysis*, McGraw-Hill).

At the end of a natural business year, the financial statements will show the greatest normal liquidity position attainable, and for that reason a balance sheet drawn up as on this date will be a better index of the concern's liquidity position. A normally satisfactory ratio for the current liabilities is not to exceed two-third of the tangible net worth for a medium enterprise and not to exceed three-fourths for a larger one.

However, if Balance Sheets of companies are analysed, one is likely to come across percentages of current liabilities to Net Worth as low as 20% and as high as 110%, but in such cases additional scrutiny becomes necessary.

#### Total Liabilities to Net Worth

In majority of companies, total liabilities and current liabilities are identical, Total liabilities are different in those cases where debentures are issued or long term loans which mature later than a year from the date of the balance sheet appear. In such cases, however, it is prudent to see that the stake of the creditors is not more than that of the stockholders in the business and for that reason a percentage in excess of 100 for the total liabilities to the tangible net worth will be a bad indicator.

# Funded Debt to Net Working Capital

A funded debt is a long term liability of a business. All loans or liabilities maturing later than a year from the date of the Balance Sheet may be properly regarded as a funded debt, but it would be better to treat borderline cases as current liability and excluded from this computation. It is correct to assume that under principles of sound financial management the funded debts should not exceed the net working capital. Where such instances occur the companies are faced with the problem of ope ating their current activities out of long term borrowings which in itself is a burden and may weigh heavily against their making reasonable profits for their shareholders. In normal practice, this ratio expressed as a percentage varies from 20 to 100 for a wide variety of industries, and for that reason it would be inadvisable to come to conclusions only on the basis of this indicator.

#### Fixed Assets to Net Worth

The ratio of fixed assets to net worth indicates the potentiality of the business to earn income from its circulating capital. Any business in which a large proportion

of its invested funds are locked up in fixed capital is in a relatively less advantageous position to earn its income compared to other organizations who have a larger proportion circulating in the business to by materials, pay wages and generally finance operations.

Normally, fixed assets and tangible net worth of a business remain static unless fresh additions to assets or capital are made, and to that extent fluctuations in these ratios from year to year are not marked as in the case of other ratios. In the case of manufacturing industries, where investment in land, buildings, plant and machinery are necessarily high, this ratio tends to become higher as compared to purely trading companies. It is sound advice to keep investments in fixed assets as low as possible, and for that reason, for a medium enterprise its fixed assets should not exceed two-thirds of its net worth and for a larger one three fourths.

#### Net Sales to Inventory

Inventory for the purpose of this definition is the stock of manufactured articles or finished products for sale. The purpose of this ratio is to ascertain the stock of manufactured articles kept in stock to feed the sales. The purpose of analysis is to reduce the stockholding so that capital could be utilized for selling activities and achieving a higher turnover target.

For the purpose of calculating this ratio the sale turnover for the year is reduced to its Goods Consumption Value (i.e. Net Sales less Gross Profit margin) and from this the average daily sale is calculated. The stock figure is divided by the average daily sale to ascertain the number of days stock held in the stores. The figures are expressed as so many days stock.

In the case of manufacturing establishments, the inventory will include raw materials, work in progress and finished stocks and these may be expressed in terms of a percentage of the total factory output.

#### Inventory to Net Working Capital

The purpose of a business is to sell goods and make a profit out of this. It is better to reduce the stock position to achieve the maximum turnover of the working capital. Sometimes stocks are held in anticipation of a price increase and in such cases the additional profit has to be considered reward for the speculative risk involved. As opposed to the price increase the possibilities of a downward trend, depreciation, loss and wastes are also likely. To gauge this speculative tendency and, to ensure that the working capital is utilized in the normal running of the business this ratio of the inventory to the Net Working Capital is usually employed. From experience it is found that this ratio varies from 60 to 150 per cent, but for a medium enterprise it would be useful to restrict the inventory to three-fourths of the

net working capital while in the case of larger companies the figure should not exceed the net working capital.

#### Accounts Receivable to Net Sales Turnover

This ratio of the Debtors to Sales is a good measure of the outstandings position of a company. A salesman can very definitely achieve a higher sales target, if he can exceed the credit terms and, in fact, the last minute efforts to achieve sales targets are accomplished by dumping goods with dealers or customers on extended terms of credit. The Debtors position can be expressed as so many months average sales or in days as average collection period. The collection period will vary with industry, but it should be preferable to watch that the debtors outstanding is not significantly in excess of the normal credit terms.

#### Net Sales to Net Worth

The net sales to tangible net worth reflect the trading activity of the business and its income-earning capacity. Though it is considered advisable to multiply the net worth in trading, over-trading can be more dangerous than under-trading. In over-trading conditions, excessive use is made of outside credit facilities, and situations may well arise when creditors' position mounts high as compared to the stockholders' interest in the business. Larger corporations are, therefore, more conservative in regard to over-trading as compared to smaller companies who have a less proportion of invested funds in the business.

The ratio of net sales to net worth may vary from 1.75 to 15 and depends to a very great extent on the type of business. In retail selling, selling for cash, the ratio is likely to be higher than for manufacturing industries. The best procedure to arrive at a satisfactory performance level is to compare with the ratios for similar successful companies in the same field. Under-trading is more generally come across than over-trading.

#### Net Sales to Net Working Capital

The ratio of net sales to net working capital follows very closely the ratio of net sales to tangible net worth.

In the case of companies who have a large proportion of working capital locked up in fixed assets, the ratio may tend to be higher as compared to a company who has a larger percentage of its working capital in current assets. This ratio varies from 3.5 to 20 in the case of companies and for that reason it is difficult to establish standards for all companies to follow. In this case as well, the best means for assessing performance is to compare with standards established for similar companies in the same industry.

#### Net Profit to Net Worth

The profitability of an enterprise is a prime consideration in assessing its financial position. Without profits of an adequate volume, the continued existence of a company cannot be ensured because the increase in its working capital is more generally achieved by ploughing back into the business surplus earnings than by additional investment. Where profitability is low the potentialities for growth are limited. At the same time, a disproportionately high percentage of profit on the net worth may bring about charges of profiteering and also necessitate issue of bonus shares to bring about a happier relationship. The percentage for this varies from four to fifteen.

#### Net Profit to Net Sales

The percentage of net profit to net sales can be a good indicator of the success of an enterprise, but this alone should not be the criterion to judge successful financial management. The relationship of its assets and liabilities and the other ratios discussed earlier should also be considered in the final assessment. The percentage can be as low as 5 and as high as 6. Where a large volume of sales is achieved with the minimum amount of invested funds, the percentage of net profits to the net sales tends to be lower and where the invested funds bear close relationship to the sales, the percentage happes to be higher.

#### Suggested Reading

How to Evaluate Financial Statements By Alexander Wall. Harper & Brothers.

Practical Financial Statement Analysis By Roy A. Foulke. Foulke. McGraw Hill.

#### QUESTIONS

- 1. What is meant by Percentage Analysis?
- 2. What are the ratios normally used in understanding financial statements?
- 3. What are the items shown in the Balance Sheet of a company?
- 4. What is meant by the terms Net Worth?
- 5. What is meant by profitability of a company? How is this calculated?

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