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2.0 PERFORMANCE EVALUATION

Performance means achievement of an anticipated course of action or a success in working. The performance of an enterprise refers to the sum of goods and services produced during a given period of time. There exists hardly any Universally acceptable pattern to explain the essence of performance of an enterprise.¹ The performance of an organisation in the public service context refers to “the extent to which its work is carried out within the established specifications for goods or services produced, to the general satisfaction of the clientele served, within given cost and time constraints, and in such a manner as to support or contribute to the achievement of the organisation’s objectives”.²

Evaluation is a ‘judgement worth’ of some thing. Performance evaluation may be used synonymously for performance appraisal, review and measurement. It refers to an on going evaluation of the quality, quantity, style and also determinants of the present performance growth, potential, etc. providing control information aimed at performance improvement, growth and satisfaction.³ Thus performance evaluation might be used to provide information about various aspects of identified problems to the owner to decision maker, finally, it might be used to motivate the decision maker in a manner demanded optimal by the owner.⁴

2.1 EVALUATION CRITERIA

The choice of a performance measure is important both for the management and for the employees. It is reflective of the fact that to which aspect of performance the highest importance is attached by the management. For the employees, performance measure acts as a basis to tailor their operating behaviour. Performance measurement criteria differ between the public sector and private sector manufacturing enterprises. In the government circulars and speeches

there is no mention of any criteria for performance evaluation except that of capacity utilisation in the First Five Year Plan (FFYP) and also in the Two Year Plan of Bangladesh government. But capacity utilisation itself cannot tell about the overall performance of an enterprise as it depends on various other factors. A chairman⁵ of a Sector Corporation noted that “unlike private sector where a criterion is profitability, in public sector no criteria have yet been fixed. Is it production or is it profit or is it social service”? Unless there is recognised criteria for evaluating performance, the management of an enterprise remains in confusion. But it appears from official announcements that, in measuring the success or failure of Sector Corporation, the profitability has been given emphasis as the main indicator of performance evaluation.⁶

Performance of public sector enterprises has been the subject matter of discussion at all levels, i.e. at different level of government administration, parliament, private sector, intellectuals and public at large. On the discussion at all these levels, the Return on Investment (ROI) had invariably been taken as the yardstick of evaluating the performance of public sector enterprises. How much profit has been earned in relationship with the amount invested by the government.⁷

The use of ROI as a measure of performance evaluation gained momentum when its designer ‘Du Pont’ started functioning on decentralised lines in 1920’s. The measure is being heavily used for performance evaluation, the world over, since then.⁸ The studies relating performance measures in public enterprises conducted in the past (Moshi, 1988; Fubara, 1982; Ahmed, 1982; Ogilug Webb, 1980) measure performance in terms of economic profitability.⁹ Habibullah¹⁰ used as many as eleven financial ratios to assess industrial efficiency and profitability of jute manufacturing industry of Bangladesh. Financial performance measurement to improve performance acts like a scoreboard in a football game. Although the scoreboard tells the coach whether they are winning or losing, it

does not provide them with much guidance as to which plays should be called. In business terms, managers and performance measurements of the activities and prior to outcomes that lead to superior financial results (Eccles, 1992).¹¹

The conventional concept of Return on Investment is supreme for private sector but generally it has been felt that this yard stick has certain limitations in case of public sector enterprises due to the fact that other than profit earning, they have been established also to achieve certain other social objectives such as the establishment of capital intensive industries, making available the products and services at cheaper rates, providing employment, better wages, substituting imports, increasing export, serving the interests of suppliers (such as cane growers in sugar industries).¹²

According to Johnnie, (1988b), De Poula, (1967) while identifying the level of performance of public enterprises, we should look beyond the balance sheet records and use some additional indices, such as social profits and other non-quantitative factors. Campfield (1971) and Martindell (1962) have earlier advanced a rather wholistic argument saying that a good way of measuring performance is by a complete review and evaluation of the organisation's total set of activities.¹³ In the words of Mahmud and Das¹⁴ "Multiple criteria or composite criteria is the best answer to performance evaluation (PE)." "Under the System of multiple criteria, it is felt that almost all aspects of the job will receive adequate attention and emphasis, so that efforts of individual will not be distorted."¹⁵ Mahmud and Das (1986) argued that PE is a hybrid, sharing of public governmental institutions and private enterprises, so here, neither commercial profitability nor social profitability alone can rightly represent essential characteristics of sound performance evaluation. They have given a list of possible multiple criteria taking a mix of financial indicators, operational indicators and socio-economic indicators that can be used for performance evaluation.

In the Indian Subcontinent, several studies have been undertaken on the assessment of organisation's performance. Sobhan and Ahmed¹⁶ used value added, capacity utilisation, sales and profitability of the nationalised industries as well as production trend as performance indicators. In another study "The Economic Performance of the Denationalised Industry in Bangladesh: The case of Jute and Cotton Textile Industries", the authors used aggregate production trends, efficiency levels, productivity, financial performance and capacity utilisation as criteria for comparing the performance of public and private sector industries.¹⁷ Ahmed¹⁸ in his comparative study of efficiency and profitability of jute mills under former EPIDC management, joint EPIDC/ private management and some mills under purely private management, used number of looms, production capacity, percent of capacity utilised, production per loom per year at actual tonnage; production per loom per hour in lbs, profit before appropriation and profit per loom as indicators. Shaha¹⁹, for comparing the performance of denationalised spinning mills during pre and post denationalisation periods, took the following indicators—production and its changes within these two periods, comparative position of installed and operating capacity, sales, cost of production per lb of yarn and profitability in these two periods. Haque²⁰ used productivity and profitability as the criteria for comparing the performance of public sector, private sector and multinational enterprises of Chittagong.

2.2 CAPACITY UTILISATION

Capacity utilisation means that proportion of the total capacity which has been gainfully utilised for production of required goods and services. Like the concept of productivity, the term capacity is often used to connote different meanings. It has different meanings when looked from different angles. The different concepts of capacity are discussed below:

Licensed Capacity: Licensed capacity means the capacity for which a firm has obtained a licence from the competent issuing authorities.

Designed Capacity: After the Licence is obtained, the job of erection or supply of plant is given to a manufacturer or supplier, who designs a plant for certain capacity. Designed capacity of the plant is a technical factor and therefore may not be equal to licensed capacity.

Installed Capacity: Being satisfied that the plant is properly installed according to specifications, the manufacturer and management declare the installed capacity of the plant. This is the maximum possible capacity which can be gainfully utilised. This installed capacity may or may not be equal to licensed or designed capacity.

Rated Capacity: Rated capacity refers to the maximum capacity which can be utilised under conditions prevailing in a country. Rated capacity is the ideal capacity under given conditions.

Attainable Capacity: Though rated capacity is the capacity which can be utilised under ideal conditions existing at the time when plant was installed and capacity rated, certain unforeseen and uncontrollable factors may cause a shift in these ideal conditions. If these factors are of a permanent nature, and the rated capacity of the plant can never be achieved (unless the whole plant is re-structured) the capacity of the plant will have to be re-rated. The maximum possible capacity under the changed circumstances is called "attainable capacity".

Available Capacity: Attainable capacity may not be available for certain period of time due to some factors of temporary nature such as non-availability of power, feedstocks, spares, which may exist for a few months or even few years. They temporarily reduce the capacity of the plant. The maximum capacity which

can be utilised during a particular period within a given set of conditions can be called 'available capacity'.

2.3 PRODUCTIVITY AND ITS MEASUREMENT

As it is well known, productivity is a ratio of output to input, it means the overall net yield of goods and services during a special period, achieved with a given volume of resources. It may be defined as "the ratio between the production of a given commodity measured by volume, and one or more of the corresponding input factors, also measured by volume."²¹ A memorandum published by OECD (1950) defines productivity as follows: "Productivity is the quotient obtained by dividing output by one of the factors of production". According to the American Productivity Centre, productivity is "Total output over total input and that the inputs include labour, capital, energy, materials and purchased services."²² The concept of productivity guides the management in production process and measures its success. It measures the degree of efficiency at which man, materials, money and energy are utilised. The increasing productivity means the increasing efficiency of various resources of production or better results with lesser efforts.

But unfortunately, productivity does not convey the same meaning to all those who use it. According to Thomas K. Connellan²³ "Productivity means different things to different people. To workers productivity means a speed-up in their work pattern, To union leaders, it means the opportunity to negotiate for higher wages. To management, it means increased profitability, to consumers, it means better goods at lower cost, to marketing directors, productivity improvement increases the firms competitiveness abroad by reducing the cost of its goods sold in foreign markets and to economists, it means an increase in country's standard of living tied to gain in output per man hour".

Productivity may be of labour, capital, power, raw materials etc. or may be a combination of two or more of these factors. In actual practice the word “productivity” has almost become a synonym of “productivity of labour” for it is always understood to denote labour productivity when it is accompanied by any qualifying word before it. But the concept of labour productivity has been criticised by some authors. Professor Davis, H. S.²⁴, pointing out the incompleteness of this concept, raised the questions that: can total input be completely expressed in labour terms? Can the efficiency of industry be fully measured by the ratio of physical output to labour effort put forth, including the sum of actual and embodied labour? Similarly Fabricant²⁵ points out the inadequacy of labour productivity in the following words: when other resources are used in significant volume and change occurs in the volume of such resources used (which is almost, always the case), a measure of productivity based on a single resource might tell us little or nothing of change in the efficiency with which this resource was being utilised. It might not even point in their right direction.

From this criterion it seems that the concept of labour productivity alone is not very helpful in underdeveloped countries.

Productivity measures the relationship between actual inputs used and actual outputs achieved, the lower the inputs for a given set of outputs or the higher the outputs for a given sets of inputs, the higher the level of productivity. So productivity measurement focuses on two aspects of the relationship between inputs and outputs. It evaluates– i) whether more input than necessary have been used to produce output and ii) whether the best mix of inputs has been used to produce output. We may have as many productivity ratios or indices as there are factors of production. The basic productivity ratio is:

$$\text{Productivity} = \frac{\text{Output}}{\text{Input}}$$

Kendrick and Creamer²⁶ are considered to be the founders of this concept and take the credit of presenting the first model for measuring productivity in a systematic manner. The authors consider that a company's productivity can be measured and analysed in basically three types of productivity indices—

$$\text{a) Total productivity Index} = \frac{\text{Total Output}}{\text{All Input Factors}}$$

$$\text{b) Total Factor Productivity Index} = \frac{\text{Net Output}}{\text{Total Factor Input}}$$

where, Net output = Output – Intermediate goods and services,

Total Factor Input = Manpower Input + Capital Input.

$$\text{c) Partial Productivity Index} = \frac{\text{Output}}{\text{One Factor of Input}}$$

Input factors are considered as labour, capital and materials and the partial productivity Index, so obtained are referred to as partial productivity of labour, partial productivity of capital and partial productivity of materials.

This model of productivity measurement as suggested by Kendrick and Creamer has influenced researchers extensively and a large number of models have been formulated which are either modifications or extensions of the suggested approach.

2.4 CONCEPT OF COST

Horngren²⁷ explains the term 'cost' as "sacrifice or foregoing." According to "the terminology of Cost Accounting" issued by the Institute of Cost and Management Accountants, London, the term 'Cost' has been defined as "the amount of expenditure (actual or notional) incurred on, or attributable to, a given thing." The Institute of Chartered Accountant of India in 'Guideline Note on Terms used in Financial Statements' defines cost as "the amount of expenditure incurred on or attributable to a specified article, product or activity,"²⁸ Thus, cost has been defined as an expenditure incurred on a thing.

In a textile industry cost means different kinds of resources sacrificed for acquiring different means of production including purchase of raw cotton and other materials and all other conversion costs incurred for converting the raw cotton to yarn of different counts.

2.5 ELEMENTS OF COST OF PRODUCTION

Management needs analysis of cost to take decision and to control cost and analysis leads to subdivision of costs into different elements. The foundation of the sub-division of costs into different elements is the economic homogeneity of different types of expenditures. These elements of cost characterise the structure of cost of production and total cost, and the nature of their changes with the change in other variables in the production process.²⁹

Three general elements of manufacturing cost are usually recognised: direct materials, direct labour and factory overhead. These components of cost of production are discussed, in brief, in the following paragraphs.

i) **Direct Materials:**

Direct materials are those materials and supplies, which can be identified with the manufacture of a product or of a group of products in a manufacturing concern. Materials may be considered as direct charge at one time, but an indirect or overhead charge on other occasions. The test for direct materials is that they must be accountable and traceable as they enter into the product, service, or job. On this basis, they are distinguished from indirect materials, such as stationary, oil and gasoline, which are used, for general administrative and manufacturing purposes and from repair parts and replacements, which are required for equipment and buildings. Direct materials, thus generally include—

- a) all materials specially purchased or requisitioned for a particular process, job or production order;
- b) all components, either by purchase or by production, similarly used;
- c) all materials passing from one process or operation to the other;
- d) all primary packing materials i.e., cardboard, boxes, wrappings, cartoons etc.³⁰

The cotton textile spinning mills in Bangladesh use the followings as direct materials for their productions:

- a) *Raw cotton,*
- b) *Stable fibers like polynosic, viscose etc.*
- c) *Wool tops,*
- d) *Nylon clips.*

ii) **Direct Labour:**

Labour is the second important factor of production. Direct labour is the cost of the services of employees actually working on the product itself, rather than the cost of supervisory or other indirect labour such as clerks, foremans, department heads, timekeeper and janitors, which are some what removed from actually working on the product. A worker may be direct labour for a certain number of hours but be an indirect worker for the balance of the day. Cost paid to workers engaged in production of goods are direct labour costs or direct wages.

In case of cotton textile mills of BTMC and BTMA, labour cost means the wages and salary paid to the persons working in the production department. The theory of cost accounting defines labour cost as the wages paid to the labour directly engaged in the production process. In the annual reports of BTMC and member mills of BTMA, the statement of cost of goods sold showed the total cost of wages and salaries in one single head and only office salaries under other heads.

iii) **Factory Overhead :**

Factory overhead includes all costs related to factory production which are not direct materials or direct labours. Certain items of overhead may be determined directly for a machine, an operation, or a department but will be indirect as to the unit of output. An overhead item, such as electric power, may be identified by meter with a machine or department which produces a number of units of output.

Three categories of factory overhead may be distinguished: a) indirect materials, b) indirect labour and c) general factory overhead. These components of factory overhead are discussed separately below:

(a) Indirect materials:

Indirect material is the material that can not be traced in the finished products such as consumable stores, i.e., lubricants, cotton waste, grass, oils, works stationary etc. These sorts of indirect material do not form the major part of output but inevitable for production. These minor items of materials such as thread in shirt making can not be conveniently treated as direct material but enter into production and related to factory, become part of factory overhead. The very nature of technology used in the cotton textile spinning mills does not require the use of any kind of indirect materials.³¹

b) Indirect Wages:

Indirect wages represent that parts of labour, which can not be directly identified with a job, process, operation but auxiliary to production, are generally treated as indirect wages. Generally expenses like wages to supervisors, watchmen, firemen, inspectors, maintenance workers, overtime premium, holiday works bonus etc. which are not directly related to physical production are categorised as indirect wages.

c) Other Indirect Expenses:

There are some other expenses, which are neither indirect material nor indirect wages nor can be charged to production directly and are generally termed as indirect expenses. Examples of other indirect expenses are depreciation of factory building and equipment, insurance on factory, rent, taxes, utilities etc.

Normally, in the cost accounting literature, total factory overhead is shown in a single head. But from analytical and control point of view, it is better to subdivide the total expenditure into major components which form this total cost. In the statement of cost of goods sold of cotton textile mills under BTMC (Public Sector), the total factory overheads are sub-divided into power and fuel,

stores and spares, depreciation, insurance and the remaining components are grouped into other factory overhead. On the other hand, in the case of cotton textile mills of BTMA (Private Sector), the total factory overheads are subdivided into some more minor heads such as, carrying and loading and unloading expenses, laboratory test, inspection fees etc.

In both the cases of mills under BTMC and BTMA, some indirect expenses (other than indirect material and indirect labour) such as power and fuel, stores and spares, depreciation etc. occupy a significant position. Our investigation has been kept restricted only to power & fuel and stores & spares and depreciation as significant part of factory overhead.

2.6 CONCEPT OF PROFIT AND PROFITABILITY

Profit :

The excess of output over the input factors expressed in monetary terms is called profit. Thus it is the excess of income over costs. Kohler³² defined profits as "A general term for the excess of revenue, proceeds or selling price over related costs." Actually, the meaning of profit differs according to the use and purpose of the figure. For accounting purpose the profit is the difference between total revenues and total expenses over a period of time. The term has several connotations and each concept is used in a distinct context. Gross profit is the difference between sales and the manufacturing cost of sold goods. The most common measures of profit is profit after taxes (PAT), or net income which is a result of the impact of all factors on the firms earnings. Taxes are not controllable by management. To separate the influences of taxes, therefore, profit before taxes (PBT) may be computed. If the firm's profit has to be examined from the point of view of all investors (leaders and owners), the appropriate measure of profit is

operating profit. Operating profit is equivalent of earnings before interest and taxes (EBIT) when the firm does not have non-operating income. This measure of profit shows earnings arising directly from the commercial operations of the business without the effect of financing. The concept of EBIT may be broadened to include non-operating income if they exist.

Profitability :

The basic objective of a business is to earn a satisfactory return from it. The crucial indicator of financial performance of an enterprise, therefore, is its profitability. The word "profitability" is composed of the word 'profit' and 'ability'. The term ability reflects the power of the enterprise to earn profit. This ability is also referred to as 'earning power' or operating performance of a concerned investment. Therefore, profitability means the profit making ability of a firm and is a 'qualitative term' used in business world to measure the profits earned by a firm in a particular time span. According to Gibson and Boyer³³ "profitability is the ability of the firm to generate earnings". Haward and Upton³⁴ defined profitability as the ability of a given investment to earn a return from its use. Sometimes the term "Profitability" and "profit" are used synonymously but there is difference between the two. According to Chakraborty³⁵, "The term profitability has a sense of relativity, where as the term profit is used in absolute sense".

Profitability of an industry at macro level and of an individual firm at micro level has obviously a direct bearing on their growth. Profits are essential for survival and growth over a long period of time in the economic and competitive world but the goal of an enterprise should not be the maximisation of profit but the maximisation of profitability.

Profitability in any single unit of business or in any industry, mainly depends upon such factors like raw materials, labour, capacity utilisation, the prices of finished products and the managerial efficiency. All these factors do play an important and indispensable role to increase the profitability. Poor operational performance may indicate poor sales and hence, poor profits. A lower profitability may arise due to the lack of control over expenses. In accounting, profitability may be described as a yardstick of the enterprise performance and indicates public acceptance of the products. In the words of Weston and Brigham³⁶, "Profitability is the net result of a large number of policies and decisions". The profitability ratios show the combined effects of liquidity, asset management and debt management on operating results.

2.7 WORKING CAPITAL AND ITS INFLUENCING FACTORS

A business firm needs capital not only to finance its fixed assets but also to finance its current assets. As we know, firms are required to keep stock of raw materials for a continuous production. Some goods remain in the manufacturing process in the form of semi-finished goods. After production is over, some of the finished goods are sold and some remain in the stock. In this way firms need to maintain inventories of raw materials, work-in-process and finished goods. If finished goods are sold on credit, investment will be needed in receivables also. After this, in the normal operations, a firm requires cash to pay for the various operating expenses in addition to pay its creditors and to pay for the taxes, dividend etc. This requires maintenance of some cash balance to avoid defaults in payment. If a firm has excess cash balance, for a temporary period, it is to be invested in marketable securities. In this way, the required assets in the normal operating cycle are inventory, receivables, marketable securities and cash. These assets are called current assets, which can be converted into cash within an accounting year (or operating cycle), and capital invested in these assets is known

as 'Working Capital'. When working capital is regarded equivalent to the total current assets, it is called gross concept. However, there is another concept of working capital, which is known as net concept. Under net concept, working capital is equivalent to total current assets minus total current liabilities, which is financed with long term funds.

Gross working capital concept is a broader concept and emphasises on the quantitative aspects, while net working capital concept is a narrow concept and emphasises on the qualitative aspects. In fact, these two concepts are not exclusive, rather they have equal significance from management view point. The gross working capital concept focuses attention on two aspects of the management of current assets: a) optimum investment in current assets and b) financing current assets. Investment in current assets should be optimum, i.e., neither too high nor too low as these are the two danger points. Excessive investment in current assets should be avoided, because it impairs firm's profitability, as idle investment earns nothing. On the other hand, inadequate amount of working capital can threaten solvency of the firm because of its inability to meet its current obligations. It should be realised that the working capital needs of the firm may be fluctuating with changing business activity. This may cause excess or shortage of working capital frequently.³⁷ The management has to maintain a judicious balance between the profitability and liquidity or in other words, between: return and risk.

Another aspect of the gross working capital points to the financing of current assets. Additional funds required to finance current assets should be made quickly. Further, if suddenly some surplus funds arise, they should be invested in short term securities instead of keeping it idle. Thus management should be aware of the sources of finance as well as avenues of temporary investment.

As against gross working capital, being the difference between current assets and current liabilities, the net working capital indicates- a) the liquidity position of the firm and b) suggests the extent to which working capital needs may

be financed by long term sources. The higher the net working capital, better the liquidity position and vice-versa. It should not be too high, for it adversely affects the profitability. As a rule of thumb, current assets should be twice the current liabilities. A negative working capital means a negative liquidity, and may prove, to be harmful for the company. Excessive liquidity is also bad. It may be due to mismanagement of current assets.

Influencing Factors :

There are no specific set of rules to determine the working capital requirements of an enterprise. But the working capital should be adequate to conduct business operations efficiently and effectively. According to Mc Mullen,³⁸ "Working Capital should be sufficient in amount to enable the company to conduct its business on the most economical basis and without financial stringency and to meet emergencies and losses without danger of financial disaster." Working capital needs of a firm are influenced by a large number of factors. As all factors are of different importance, the effect of relevant factors should be analysed while deciding the quantum of working capital requirements. The following is the description of some of the important factors:

(a) ***Nature and Size of Business:*** Nature and size of a firm have important bearing on the quantum of its working capital. Generally, trading and financial firms require a large sum of money to be invested in working capital than fixed assets. But service firms need less investments in current assets as against fixed assets due to a short operating cycle. Some manufacturing business, such as tobacco manufactures and construction firms, also have to require a substantial working capital and have to invest a nominal amount in the fixed assets. Working capital needs of the most manufacturing concerns fall between two extreme requirements of trading firms and service firms. Such concerns have to make adequate investment in current assets depending upon the total assets structure and other variables. The size of business also determines the size of working capital.

- (b) **Manufacturing Cycle:** Manufacturing cycle also has a bearing on the size of working capital which covers the purchase and use of raw materials and the production of finished goods. If manufacturing cycle is long, firm's working capital requirement will be large. In contrast, if the cycle is short, low will be the firm's working capital requirement.
- (c) **Seasonality of Operations:** In the case of seasonal industry, working capital requirements fluctuates highly during the year. For instance, a substantial amount of working capital is required during winter season in woollen goods manufacturing company as the production goes on at its peaks during that period. But in summer, the need for working capital decreases sharply in that industry. Again a stable working capital is required in perennial industry, where production and sales go on throughout the year.
- (d) **Production Policy:** A firm may maintain a constant production strategy in order to minimise the working capital problems arising from seasonal changes in the demand for its product. A steady production policy causes heavy inventories to accumulate during the off season periods resulting in a greater inventory costs and risks. Thus, if costs and risks of maintaining a constant production schedule are high, the firm may adopt the changing production schedules considering its changing products demand. The firms who manufacture a variety of products, can diversify their activities and solve their working capital problems. They can manufacture the original product line during its increasing demand and other products may be manufactured to utilise physical resources and working force during its off season. Thus, production policies differ from firm to firm and the quantum of working capital is also determined by different production policy of the firms.
- (e) **Credit Policy:** The credit policy differs from firm to firm depending upon the norms of the industry to which the firm belongs. The credit terms to be granted to customers also affect the requirement of working capital of a firm. A firm has the flexibility of shaping its credit policy within the constraint of industry norms

and practices. The firm should be discretionary in granting credit terms to its customers. Different terms may be given to different customers depending upon the individual case. A liberal credit policy becomes harmful to the firm and makes the average collection period high later on. As the fund is locked up for a longer period in receivables, it needs more working capital. Opposite of this is true in the case of a firm following a rigid credit policy. Working capital needs will be less if liberal credit terms are available to the firm and vice-versa.

(f) **Market Conditions:** The working capital requirement of a firm is also affected by market conditions. If a keen competition prevail in the market it requires a large investment in finished goods in order to give prompt service to the customer who may not be ready to wait as other firms may supply the same goods to them immediately. Further, owing to tough competition, credit terms will tend to be liberal and thus, a large investment in receivables will be needed. In contrast, if the competition is weak or the firm is in monopolistic situation, it may require a nominal investment in inventory and receivables.

(g) **Price Level Changes:** In rising price levels a firm is to maintain a higher amount of working capital. Same levels of current assets will need increased investment when prices are increasing. However, companies which can immediately revise their product prices with rising price levels will not face a saver working capital problem. Effect of rising prices will be different for different companies. Some companies may not be affected by rising price while others may be affected badly. Some will face no working capital problem, while working capital problems of others may be aggravated.

(h) **Other Factors:** In addition to the aforesaid factors, there are many other factors, which affect the working capital requirements of a firm. These factors are: rate of business expansion, operating efficiency of a firm, profit margin and profit appropriation, changes in technology, industrial policies of the Government and so on. These factors should be considered while deciding the quantum of working capital.

2.8 FINANCIAL STATEMENT AND ITS ANALYSIS

The accounting process mainly aims to accumulate and report historical accounting information showing an organisation's financial position and results of its operations. Financial Statements are the end result of the accounting process. According to Hampton, "A financial statement is an organised collection of data organised according to logical and consistent accounting procedure".³⁹ Thus all the statements and accounting reports prepared by the accountants at the end of a business cycle may be termed as financial statement. But the very use of the term as 'balance sheet' and 'profit and loss' account. The balance sheet reflects the assets, liabilities and capital of the business and profit and loss account shows the results of operations achieved during a certain period. There are two other frequently used financial statements, one dealing with sources and uses of funds and the other with the retained earnings. Thus, the principal financial statements are the balance sheet or statement of financial position, the profit and loss statement or the income statement, the funds statement or statement of changes in financial position and statement of retained earnings.

Analysis of financial statement is a process of getting an insight into the operating activities of a business enterprise. It results in the presentation of information that acts as aid in decision making by business managers, investors, and creditors as well as other groups who are interested in the financial status and operating results of a business. The analysis of financial statements of a business enterprise may be conducted either internally or externally. The internal analysis is generally conducted by management for their internal purposes and the external analysis is conducted by those or for those who are outside the business enterprise. These outside parties may be shareholders, creditors, investors, bankers, government agencies, trade unions or may be research workers.

The overall objective of a business is to earn a satisfactory return on its funds invested, consistent with maintaining a sound financial position.⁴⁰ The

financial statements are intended to state an accurate picture of financial condition and operating results of a business concern in a condensed form. The objective of financial statement analysis is a detailed study of profitability and financial position with cause and effect. An analyst of financial statements attempts to interpret and draw conclusions from the statements. Garison⁴¹ has stated, "The purpose of financial statement analysis is to assist statement users in predicting the future by means of comparison, evaluation and trend analysis.

2.9 RATIO ANALYSIS

To evaluate and analyse the financial position and performance of an enterprise, the analyst needs certain techniques. The commonly used technique for analysis of financial statements is the 'Ratio Analysis'. It is the principal technique used in judging the financial growth, development and the present condition of a business enterprise. Ratio is the numerical relationship between two numbers. And hence, ratio analysis of statement stands for the process of determining and presenting the relationship of items and groups of items in the statements.⁴² In the words of Batty⁴³ the term 'accounting ratios' is used "to determine significant relationship which exist between figures shown on a balance sheet, in a profit and loss account, in a budgetary control system, or in any other part of the accounting organisation." The technique of ratio analysis is widely accepted in accounting and mathematical world. Analysis of financial statements of an enterprise by financial ratios enables the financial manager as well as the other external parties, to evaluate the financial condition and performance of a firm rapidly by making comparisons of ratios obtained from the firm with ratios obtained from other comparable firms.⁴⁴ In the words of Helfert, "Ratio analysis provides guides and clues especially in spotting trends towards better or poor performance, and in finding out significant deviation from any average or relatively applicable standard".⁴⁵

However, ratios may be expressed in the following three ways⁴⁶ :

- a) **Ratio** : Specifically the simple division of one number by another, e.g., current asset to current liability ratio is 2 : 1.
- b) **Rate** : The ratio between two numerical facts usually over a period of time, e.g., stock turnover is three times a year.
- c) **Percentage** : A special type of rate which expresses the relation in hundredth, e.g., gross profit is 25% on sales. For types of financial ratios are commonly used —(i) liquidity ratios, (ii) profitability ratios, (iii) activity ratios, and (iv) leverage ratios.

2.10 32s AVERAGE COUNTS

The cotton textile spinning mills under public and private sector of Bangladesh are engaged in producing yarn of different counts viz., 10s, 16s, 24s, 32s, 45s, 62s, 80s etc. Higher counts means finer and thinner yarn. The production of these different counts of yarn is converted into an average counts, viz., 32s, 45s etc. for the comparison purposes by the mills and corporations. In BTMC, the production of different counts of different mills is converted into an average 32s counts. We have taken production data of sample mills under both sectors as 32s average counts for our comparison purposes.

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