CHAPTER 1
CHAPTER 1

INTRODUCTORY

1.1 INTRODUCTION

1.1.1 The corporate sector in one form or the other existed in the ancient past. But, at that time much attention was not paid to it. However with the passage of time, the corporate sector has come to play a predominant role in the economic life of almost all the countries, irrespective of their ideological moorings. This sector has been recognised as a model and democratic form of business organisation. It plays a pivotal role not only in the industrially advanced countries, but also in the developing countries like India. The process of industrialisation and development of business activity in these countries are inter-related and inter-dependent. This sector, in turn, operates within the purview of the economic environment, industrial culture, and political and social philosophy.

1.1.2 Industrialisation has an important role to play in the economic development of a country. The corporate sector is the backbone of the Indian economy so far as it provides a vital, effective and organised systems for the growth of the industrial as well as non-industrial sectors of the economy. The contribution of the corporate sector towards the balanced development of various areas of an organised economic activity can easily be seen in the combined efforts of various companies.
in achieving the goal of industrialisation and increased production. Ultimately the gross domestic product and the tax revenue to the Government in the form of both direct and indirect taxes are maximised. The rapid growth of the corporate sector in India and the increasing scale of its operation and investments have turned it into the most dominant form of economic organisation.

1.1.3 The corporate sector in India has three components, viz., (1) Private sector, (2) Public sector and (3) Joint sector.

1.1.4 In the private corporate sector, the institutions and individuals exercise and enjoy legal title, right of possession, control and the disposal of assets of an enterprise in their own interest. In the case of the public corporate sector, the rights are vested in such political bodies as Municipalities, State and Central Government and the agencies created by them. It was earlier held that in a free enterprise economy, the invisible hand of market ensures the maximum welfare of the society through the forces of competition. However, the private market rules breakdown in the real world where the restrictive assumptions of the perfect competition do not hold good.

1.1.5 In British India, industries were, by and large, under the dominance of external capital and management except certain industries under the Government control. At the same time, indigenous entrepreneurship and resources were commensurate.
with the requirements of sectoral opportunities. Besides, there were certain areas where the private sector was not enterprising due to huge investment, unattractive return and risky factors. Hence, at the dawn of independence, it was the State only which could enter into these areas. Consequently, the public sector came into existence to help in the rapid economic growth and industrialisation of the country and to create the necessary infrastructure for the economic development. Apart from this, the adoption of the socialist pattern of society as a national objective required that all the industries of basic and strategic importance or in the nature of public utility services should be in the public sector.

1.1.6 Under the Indian mixed economy, the intention was 'to let all the flowers bloom'. In this arrangement, the public sector remained overwhelmingly involved with the development of the basic sectors, while the bulk of development in terms of overall scope and quantum remained with the private sector. By the vastness of its spread, the private sector in India continues to dominate the industrial scene.¹

1.1.7 As the public as well as private sectors blossomed and proliferated in India, their problems also came into focus. In many ways, the public sector is counter-productive in the terms of efficiency and profitability. Day by day, most of these are

incurring heavy losses and no one is satisfied with the way the public sector is managed. Now, the public sector is popularly known as the shelter of White Elephants. Similarly, the private sector is facing many problems like diversion of surplus into parallel underground economy, the artificial manipulation of output, supply and price to earn huge profits, etc. In this context, it was felt by the government, the economists and the industrialists to have a new sector, which will combine the merits of the two sectors and at the same time exclude their inadequacies.

1.1.8 Although the joint sector concept was conceived by the authors of the 1956 Industrial Policy Resolution, it was really a brain-child of the Industrial Licensing Policy Enquiry Committee which is popularly known as the Subimal Dutt Committee. Besides the public and the private sectors, there was a need for a new sector -- a joint sector -- in the interest of the harmonious industrial development of the economy.²

1.1.9 A joint sector has the advantages of both the public and the private sectors and at the same time, it eliminates the drawbacks of both the sectors. Thus, it fulfills the basic socio-economic objectives of the company. This concept is basically an extension of the idea of a mixed economy. The joint sector was introduced in 1970. However, the joint sector

has not yet made its presence felt, either in terms of industrial coverage or in terms of its contribution to the economic growth. Therefore, we shall confine our discussion to the public and the private sectors only.

1.1.10 India launched her programme of planned development in 1951. The objectives of India's Five Year Plans are 'achieving a high and rapid rise in the standard of living of the people and a fuller and richer life for them through additional employment opportunities and increased production. An equally important aim is to achieve a balanced economy by the evolution of an expanding and diversified agricultural system, encouragement of cottage and small scale industries and development of large scale consumer goods and heavy industry.' Although to achieve development in all the spheres of our national life is the chief aim of all our Five Year Plans, each Five Year Plan has its own aims and objects. The first plan (1951-56) was biased towards agricultural development and neglected the vast fields of industry. The second plan (1956-61) placed emphasis on accelerating the rate of growth of the economy, increasing employment opportunities, reducing disparities in the income and wealth, and preventing concentration of economic power. The special feature of the third plan (1961-66) was that it aimed at a self-reliant economy. But, the fourth plan (1969-74) focused its attention on removal of disparities between class and class, and region

and region. Self-reliance and removal of poverty were the two major objectives of the fifth plan (1974-79). Among others, the main objectives of the sixth plan (1980-85) were to ensure a significant step-up in the rate of growth of the economy and a progressive reduction in regional inequalities in the pace of development. The seventh plan (1985-90) sought to emphasise policies and programmes which would accelerate the growth in foodgrains production, increase in employment opportunities and raise productivity. Generating adequate employment, containing population growth through people's active cooperation, providing safe drinking water and primary health facilities, diversifying agriculture to achieve self-sufficiency in food and strengthening the infrastructure sector in order to support the growth process are the basic objectives of the eighth plan (1992-97). According to the Sixth Plan Document, the basic objectives of planning in India can be grouped under four heads — growth, modernisation, self-reliance, and social justice. However, these are not independent objectives. They are linked in that success with respect to any one makes it easier to achieve the others.

1.1.11 The Asian Development Bank (ADB) said on 11th May, 1997 that within South Asia, India accounted for most of the poor with a poverty rate of 52%. Thus, poverty is India's largest, most urgent and most fundamental problem. Although India's rapid economic growth has led to a significant drop in

poverty, it remains a pressing concern. In a recent study conducted by the World Economic Forum, a business organised research institution in Geneva, which analysed 53 countries for ranking them as the most competitive and least competitive, and countries with the biggest growth potential and smallest growth potential; India ranked number three (1st U.S., 2nd China) in growth potential category but cut a sorry figure when it came to most competitive category, emerging only at number 45 (1st Singapore, 2nd Hongkong, 3rd U.S.). It confirmed India's potential to be an economic giant in the global market.

Economic and industrial growth is the result of the interaction of three key factors: investment in capabilities, which is a function of savings; the productivity with which these capabilities are used; and entrepreneurial ability. The profit earned by the entrepreneurs constitutes major source of the savings of the community. This classical view of savings by profit earners and their conversion into investment was the main factor responsible for the economic development of Great Britain in the 19th century. However, Karl Marx pointed out that it was the rate of profits and not the absolute level of profits that influenced capital accumulation and investment. The objective of maximising the rate of profits is basically dependent on the productivity of capital stock. Improved technology has the effect of lowering down the relative value of the capital stock and thereby raises the productivity. The expected rise in the rate of profits serves as an incentive for the entrepreneur to make technological innovations in
production. A capable and efficient entrepreneur, by attempting to widen the rate of profit through adoption of improved techniques and methods of production, helps in stimulating economic growth of the country.

For a country like India, with a multiplicity of socio-economic demands on its capital, how such limited resources are utilised assumes fundamental importance. While substantial investments can be a precondition for economic transformation, it is only the productivity of such investments which yields further re-investible resources. These generate surpluses, which then motivate entrepreneurs toward undertaking further industrial activity.

In a dynamic context, an approach where focus is on output growth rather than on the efficiency in generating such output ignores a basic concept: capital has an opportunity cost; if it does not yield a minimum return as a result of good utilisation, it is better used elsewhere. That efficiency in resource utilisation has to be given a centre stage role in policy analysis cannot be denied, since dynamic efficiencies are critical in ensuring the industrial performance of a nation. In Indian literature, there is now belated recognition that efficiency has a major role to play in ensuring industrial success. Nayyar (1994:3) writes that 'Success at industrialisation is not only about resource allocation. It is as much, if not more, about resource utilisation and resource creation. The mode of utilisation of resources is a critical determinant of economic efficiency. The process of creation of
resources is a crucial determinant of economic growth. In searching for explanations of India's hitherto lacklustre economic growth, one possible reason can be the profitability of the investments which were made in the industrial sector.

1.1.12 A number of steps have been taken by the Government and other agencies for the last forty years to improve the economic condition of the country. No doubt, some achievements have been made in certain areas and the economic condition of a relatively small group of people has improved. Further, it has also been noticed that the economic growth is not uniform throughout the country. Some areas of the country were able to grow more rapidly as compared to other areas, thus creating serious regional imbalance. The Eastern region of the country is one of such examples, being the victim of regional imbalance.

1.1.13 The ever increasing importance and role of the corporate sector, specially, the private sector, in the economic growth of a country, particularly in a developing country like India, have attracted several academicians, researchers, administrators and professional institutions to conduct diversified studies in the areas. Most of these studies relate to the organisation, management and finance of the corporate sector in the country and the selected states. But, no systematic study has been made to analyse the profitability

in the corporate sector, which goes to the core of economic growth. The present study is a small endeavour to fill up this important gap in our knowledge.

1.2 EASTERN REGION IN NATIONAL MATRIX

1.2.1 The Eastern region of India, constituting a vital part of the Indian union, spreads over an area of 680,847 square kilometres which is 21% of the total area of the country. Three major states of the region, Bihar, Orissa and West Bengal, cover an area of 410,000 square kilometres, which is 60.2% of the total area of the Eastern region and 12.7% of the country. The total population of the region is 217,659,480 (Approximately 22 crores) which constitutes 25.7% of the population of the country. Out of the total population in the Eastern region, 186,112,166 (Approximately 19 crores) inhabit in three major states, i.e., Bihar, Orissa and West Bengal. Their population constitutes 85.5% of the population of the Eastern region and 22% of the nation.

1.2.2 The Eastern region is endowed with a variety of natural and mineral resources like coal, iron ore, manganese, mica, bauxite, chromite, graphite, dolomite, nickel, tea, jute,

6. Eastern region consists of ten states and one union territory such as Arunachal Pradesh, Assam, Bihar, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Tripura, West Bengal, and Andaman & Nicobar Island.


timber and oil. Bihar accounts for nearly half of the coal, bauxite and mica produced in the country. Besides, the entire output of kyanite and about 90% of apatite are found in this state. In recent years, radio-active minerals have been discovered in Singbhum district of this state. Orissa occupies an important place in the mineral map of the country accounting for 18.4% of the total mineral deposits of the country. It has huge deposits of iron ore and manganese along with large reserves of coal, chromite, limestone, dolomite, graphite, bauxite and so on. According to the All India Mineral Resources estimate of 1991, the mineral deposits of Orissa in respect of chromite, bauxite, iron ore, nickel ore, coal and graphite were about 98.4%, 69.7%, 26.0%, 95.2%, 23.81% and 32.6%, respectively, of the total deposits in India. West Bengal contributing about 30.0% of the total production of coal is the second largest mineral producing state in India after Bihar. The other important minerals produced in West Bengal are chinaclay, dolomite, fireclay and limestone. While Assam accounts for more than half of the entire tea output in the country, West Bengal produces another quarter, a large part of which is the superior quality Darjeeling tea. Indeed, these two states constitute the largest single tea producing area in the world.

1.2.3 The pattern of consumer expenditure is an indicature of the standard of living of the people. Engle's Ratio is an

important index used in the computation of percentage of people living below poverty line. This ratio shows the percentage of expenditure on food items to total expenditure. The more its magnitude is, the less is the level of development. The 47th and 48th Round (1992) of N.S.S. Report revealed that while the relevant ratio for the nation was 63.08%; the said ratios in respect of the states Assam, Bihar, Orissa and West Bengal were 71.98%, 77.06%, 69.82% and 69.60%, respectively. The lowest ratio at 50.50% went in favour of industrially advanced state, i.e., Maharashtra. The percentage of population below poverty line in 1987-88 was 29.9% for the country as a whole; while Assam, Bihar, Orissa, and West Bengal accounted for 22.8%, 40.8%, 44.7% and 27.6%, respectively. It was marked that Orissa topped the list in the percentage of population below the poverty line followed by Bihar. The per capita net State Domestic Product in 1991-92 at constant prices (Base year 1980-81) was Rs. 2250 for the country as a whole; while it was Rs. 1915, Rs. 1142, Rs. 1652 and Rs. 2084 for the states of Assam, Bihar, Orissa and West Bengal, respectively. The Annual Survey of Industries, 1992-93, conducted by C.S.O. reported that out of 119,494 factories working in India during 1992-93, 11,267 factories (9.4% of the total) were found to be working in the three major states of Eastern India, i.e., Bihar, Orissa and West Bengal. The factories in these three

11. Ibid.
states accounted for 16.3%, 12.0% and 12.7% of the total in respect of capital investment, value of output and net value added by manufacture, respectively.\(^{12}\)

1.2.4 Regional imbalance exists due to widespread poverty and the widening gap between the rich and the poor states, the advanced and the backward regions. Despite vast natural resources, the Eastern region has all along trailed behind many of the resource deficient but industrially developed states/regions. The Industrial development in India during the Five Year Plan periods had little impact in bridging in the gap between regional/sectoral imbalances and income disparity, in rural and urban areas of the country.

1.3 IMPORTANCE OF THE STUDY

1.3.1 The growth of the corporate sector in India has been rapid. But, there exists a regional imbalance in industrial growth in the corporate sector. The economic growth of a nation largely depends upon the growth and development of its corporate sector. The corporate sector is not only an institution for the maximisation of the shareholders' wealth, but also an administrative and social organisation possessing the capacity for initiating its own growth and thereby contributing to the economic growth of the country. The growth of an enterprise is based on its success and profit is the primary test of the success of an enterprise. The greater the

profit, the greater will be the entrepreneurial activity; greater the profit, larger is the accumulation of capital; and greater the profit, the more will be the technological innovations and thereby higher will be the economic growth.

1.3.2 The growth of a company can be measured in terms of a change in investments, sales, profit or profitability. Profitability refers to the profit in relation to the sales, investments, etc. Thus, growth in the profitability means all round growth of a business enterprise. No doubt, a change is observed in capital formation as well as profitability trend of the corporate sector. But, it is not uniform in all the companies working in the country. While companies functioning in the advanced regions prospered remarkably, the companies working in the relatively backward regions were found lagging behind. In the same region again the trends of profitability were different depending upon the size, age and nature of industrial activities of companies. Hence, at this juncture, an analysis of profitability in the corporate sector of Eastern India is felt relevant.

1.4 SURVEY OF RESEARCH

In the fifties and onwards, several attempts were made to analyse the trend and pattern of profitability in the corporate sector. This section presents some important findings of various authorities from the study of profitability.

1.4.1 Stigler [1963] hypothesised that differences in industry accounting rates of return could be explained by
differences in business risk. He confirmed that risk-averse entrepreneurs would require higher rates of return in industries in which there is higher business risk and vice versa.

In another study, Cootner and Holland [1970] reported a significant positive relationship between mean industry rates of return and standard deviations of firm rates of return about industry means (the standard deviation was used as a measure of business risk).

1.4.2 Bain [1951] reported that differences in accounting rates of return could be explained by differences in industry concentration ratios or barriers to entry. He asserted the hypothesis by finding a correlation coefficient of 0.28 between rates of return on net worth of 42 industries and concentration ratio of these industries.

Weiss [1971] surveyed over 30 or more recent studies and noted that most also reported a significant positive relationship between profitability and industry concentration.

1.4.3 A premise in many expositions of financial ratio analysis is that the industry norm represents a target ratio for firms in that industry. Lev [1969] addressed this issue for 245 firms over the 1947-1966 period. The following model was used in the analysis.

\[ z_t - z_{t-1} = \beta (z_t^* - z_{t-1}), \quad 0 < \beta \leq 1, \]

where \( z_t \) is a firm's financial ratio in time \( t \) and \( z_t^* \) to
be the industry mean (equally weighted) ratio in time t-1. His findings supported the hypothesis that financial ratios (including profitability ratios) were adjusted towards the industry mean over time. 'The speed of adjustment is determined by the size of \( \beta \); the closer \( \beta \) is to 1, the faster the period adjustment' (p.292).

1.4.4 The net income and earnings per share (EPS) series of firms could be adequately described by a random-walk model. The results of different tests used by Ball and Watts [1972] were all consistent with successive changes in earnings and EPS of firms, on average, being independent.

Similar results have been reported for the earnings and EPS series by many authors, e.g., Little and Rayner [1966] on U.K. companies and Brealey [1969] on U.S. companies. Foster [1977], by finding out, autocorrelations for 12 financial ratios (3 profitability ratios included) and 2 additional profitability series (Net income and Earnings per share) for all firms with available data on the compustat tape for the 1957-1975 period (number of firms considered for a particular ratio or profitability series not less than 600) also reported that a random-walk model could, on average, have considerable descriptive validity.

1.4.5 Financial analyst have long recognised that economy-wide and industry-wide factors affect the financial numbers of individual firms. The impetus to examining this issue initially arose from research into market and industry-wide factors in
security returns.

King [1966] examined (via factor analysis) this issue for the monthly price changes of 63 NYSE (New York Stock Exchange) stocks over the 1927-1960 period. His conclusion was that over the 1927-1952 period, general market movements accounted for over 52% of the price changes in individual stocks; the corresponding figure for the 1952-60 period was 31%. Industry factors explained an additional 13% over the 1927-52 period and an additional 12% over the 1952-60 period.

Brown and Ball [1967] examined the influence of economy and industry factors on financial numbers for firms with available data for the 1947-1965 period where only industries with 15 or more firms were examined. Four earnings variables were used: (1) net income, (2) operating income, (3) net income after tax and interest expenses, and (4) adjusted EPS. The major conclusions were

(1) On average, approximately 35-40% of the variability of a firm's annual earnings numbers can be associated with the variability of earnings numbers averaged over all firms, and

(2) On average, a further 10-15% can be associated with the industry average (p.65).

The aforesaid conclusions applied to all four forms of the earnings variables examined.

Brealey [1968] examined similar issues for the 1948-1968 period for the earnings variable EPS and reported that economy
factors explained, on average, 21% of the variability of earnings changes of firms; industry factors explained, on average, an additional 21% of this variability.

To examine and update the above results, Foster [1978] conducted the analysis of net income and 12 financial ratios (3 profitability ratios included) for the 1957-1975 period. The major conclusions were

(1) On average, economy factors explained 27% of the variations in net income changes of 457 firms over the 1957-1975 period; industry factors explained an additional 18% of this variation.

(2) On average, economy factors accounted for 19% of the variations of changes in firm's return on assets ratio; industry factors accounted for an additional 9% of this variation.

(3) The importance of economy and industry factors varied across ratios. It was strongest for the profitability and turnover ratios and weakest for the liquidity and leverage ratios.

1.4.6 The considerable amount of work on the theory of debt equity structure has resulted in what Myers [1984] has called the pecking order theory of capital structure. Two important empirical implications of the pecking order theory are

(1) Most profitable firms tend to borrow the least, and

(2) Less profitable firms have a higher debt ratio.
Brealey and Myers [1991] pointed out that according to the trade off theory high profit should mean more debt servicing capacity and more taxable income to shield resulting in a higher optimal debt ratio. Unprofitable companies with risky, intangible assets ought to rely primarily on equity financing.

1.4.7 While most of the above discussions is in terms of individual firms, it could be extended to the industry level if one assumes inter-industry differences and intra-industry similarities in capital structure. Bradley, Jarrel and Kim [1984] provided some evidence which support this hypothesis for the U.S. data. They found that there was more variation in mean leverage ratios across industries than there was in firm leverage ratios within industries.

1.4.8 Some studies have been conducted under Indian context to ascertain the firm's financial performance and condition by using financial ratios.

Pandey and Bhat [1988] identified three groups of financial ratios which contain the maximum amount of information about profitability, with available data for 612 companies on R.B.I. data tape for 1965-66 to 1984-85 period. They confined their analysis to only those companies which belonged to manufacturing and processing industries and for which sales data were available. These three groups of financial ratios are (1) Return on Investment (Profit before Depreciation, Interest and Tax to Total Tangible Assets), (2) Sales Efficiency (Profit after Tax to Net Sales), and (3)
Equity Intensiveness (Retained Cash Flow from Operations to Tangible Net Worth). They further observed a declining trend in profitability in relation to sales, shareholders' equity and total investment, whose impact has been deepened by the increasing interest burden. A consistent downward trend in the above 3 groups of ratios covering the profitability aspect was also marked across most of the firms.

Gupta [1979] identified five profitability ratios which have a high degree of predictive power regarding sickness or failure of a textile firm. These five profitability ratios are:

1. Earnings before Depreciation, Interest and Tax to Sales,
2. Operating Cash Flow to Sales,
3. Earnings before Depreciation, Interest and Tax to Total Assets including Accumulated Depreciation,
4. Operating Cash Flow to Total Assets including Accumulated Depreciation, and
5. Earnings before Depreciation, Interest and Tax to (Interest + 0.25 Debt).

However, for non-textile group of industries, all profitability ratios did equally well; none emerged as the best.

Bhat [1980] reported that among other factors, profitability was found to be a significant determinant of a firm's financial leverage.

Pandey [1985] reported that there was no definite structural relationship between the degree of financial leverage, on the one hand and profitability and growth on the
other hand; although over time profitability and growth had improved and so had the degree of leverage.

Chakraborty [1977] examined similar issues and reported that profitability was negatively correlated to debt-equity ratio.

Sinha [1993] also conducted a study to investigate debt-equity ratio in the private corporate sector in India. In the case of public limited companies only, his results were consistent with those that Chakraborty [1977] reported. However, in the case of private limited companies the margin on sales (profitability scaled by sales) was negatively correlated to debt-equity ratio.

1.5 A PERCEPTIBLE GAP

1.5.1 The above survey shows that the research in the financial management covering the earnings and profitability aspects of the corporate sector, has been undertaken largely by the researchers of advanced countries. At present, there is very little published evidence on the analysis of earnings and profitability, in the Indian context. Hence, this study is conducted to gain some preliminary descriptive evidence on the issue of profitability, in the Indian context.

1.5.2 In the financial statement analysis literature, a lot of importance has been attached to financial ratios for assessing a firm's financial performance and condition. Items of the income statement alone or along with the balance sheet
items also can generate a number of profitability ratios. But, many ratios reveal the similar things. The analyst is always at a loss to find out which ratios to use to determine the profitability of a firm. An attempt to determine inter-relationships between and among the profitability ratios, in order to select a few ratios which can possibly give maximum information about the profitability of a firm is an empirical issue. No elaborate studies have been conducted in this direction as yet.

1.5.3 There is also little evidence of finding out a single profitability index by combining several profitability ratios. The univariate approach to analyse the profitability of firms is widely used in Indian context. One limitation of the univariate approach is that different ratios can imply different predictions for the same firm. A company may seem to be doing well by one, profitability measure, while it might not be doing so well by another measure of profitability. To resolve such conflicting predictions, attempts have been made for a multivariate profitability analysis and thereby judging the profitability of a company.

1.6 OBJECTIVES OF THE STUDY

The main thrust of the study is to make a critical analysis of the profitability in the corporate sector of Eastern India. The present study initially seeks to measure the composite profitability of each sample company as well as the general profitability in the corporate sector of Eastern India.
The study also aims at making a variable-wise, i.e., industry-wise, size-wise and age-wise analysis of the profitability in the corporate sector of Eastern India. Finally, the study aims at comparing the general profitability of the corporate sector in Eastern India vis-a-vis all India.

1.7 CHAPTER LAYOUT

The entire study has been broadly divided into two parts. The first part is a theoretical review of the available literature and incorporates the methodology adopted in collection and analysis of data, while the second part gives an empirical analysis of the data collected. The first part has been divided into three chapters. Chapter 1 is introductory in nature. The methodology adopted in selection of sample and their analysis constitutes chapter 2. Chapter 3 highlights the aspects of profitability. The second part constituting the analytical part contains five chapters: 4, 5, 6, 7 and 8. Chapter 4 details an empirical approach to measure composite profitability and accordingly ranks the sample companies. Chapters 5 and 6 contain total sample analysis and variable-wise analysis, respectively. Chapter 7 tests the hypotheses of the study. Finally, in the last chapter, an attempt has been made to give the summary of the findings and conclusions of the present study.

1.8 LIMITATIONS OF THE STUDY

1.8.1 No attempt has been made in the study to assess the social profitability of the corporate sector. The social cost
of inefficiencies of operation needs to be set against social benefits. This has not been taken up in the present study because of the problems of quantification and valuation of the social costs and benefits.

1.8.2 The present study deals only with the public limited companies and excludes the private limited companies and the companies limited by guarantee and the public sector.

1.8.3 The sample companies did not follow uniform accounting period. The financial data are, therefore, so organised that they relate to twelve months of the relevant year.

1.8.4 The data collected from the Stock Exchange Official Directory, Mumbai, are not detailed in nature. Thus, the study incorporates all the limitations that are inherent in the condensed published financial statement.

1.8.5 The number of the R.B.I. sample companies was not constant over the study period. Hence, the comparison of the profitability of our sample companies with the profitability of the R.B.I. sample companies is subject to this limitation.