CHAPTER - I

INTRODUCTION
1.1 INTRODUCTION

Business enterprises, whether big, medium or small, need finance to carry on their business operations and to achieve their objectives. An ongoing business needs finance for its future growth and expansion. Finance may be raised in the form of equity share capital, borrowings or ploughing back of profits. Procurement of finance is an important function of management. Retained earnings being an important source of funds, the dexterity of management lies in the management of earnings. The primary objective of the business is to maximise shareholders investment, which translates into maximisation of stock price and the profits of its concern. The preservation and increase in the value of economic resources is the foremost goal of an enterprise. Every enterprise endeavours to earn profits at a certain minimum rate so as to enable it to reward the investors and retain-in the firm as a source of financing.¹

By earnings, we mean a company’s reported profits after all expenses including depreciation, interest and taxes have been provided.²³ Earnings focus on what an entity has received or reasonably expects to receive for its output (revenues) and what is sacrifices, to produce and distribute that output (expenses) . Earnings also include result of entity’s incidental or peripheral transactions and some effects of other events and circumstances stemming from environment (gains and losses).²

1.1.1. MEASUREMENT OF EARNINGS

The process of income measurement and reporting has an extremely significant impact on the resource allocation decision of a firm. Income represents business success and wealth maximisation. Income data is useful in dividend decisions, managerial efficiency measurement, predictions and economic decisions.⁴

3. Financial Accounting Standard Board; Concept No.5; Para 38.
Therefore, one of the vital functions of accounting is the measurement of income, which indicates the result of business activities and on the basis of which operational decisions are taken and the success or failure assessed. Louis Goldberg has differentiated between the concepts of 'Income' and 'Profit'. According to him, an enterprise cannot have income but an individual can; on the other hand, while profit or loss cannot accrue to an individual, and enterprise may be said to have earned profit or incurred loss. This distinction reflects difference in usage and cannot be viewed as a substantive difference, for what is termed 'Income' in United States, is called 'Profit' in United Kingdom. Emily Chan Chang (1962) has brought out the points of difference between accountants and economists on the concept of income.

There are two concepts of income:

(i) Accounting income, and
(ii) Economic income.

Accounting income is computed in terms of matching of related operational revenues and expenses based on recorded business transactions, which is useful in judging past performance and managerial decisions. But accounting income is criticised on the basis of realisation principle, cost allocation methods and historical cost accounting, which is not relevant to users for making investment decisions.

The recognition of revenues and expenses during accounting period poses a basic measurement problem. Accounting income is distorted because (i) most firms use accrual concept to allocate receipts and expenditure to accounting period as revenues and expenses (ii) of the optional ways of treating depreciation, Research and Development expenditures, goodwill, and patents and inventory valuation. Price level changes further complicate the measurement of income. Because of inflation, the accounting income fails to reveal true profitability of firms. During inflation the profits are earned on inventories held by firm, and depreciation allowance based on historical cost fails to maintain the firm's earning power. So, the concept of economic income has been suggested which means net increase in wealth, viz. cash flow plus change in the value of firm's assets. This definition incorporates the time dimension,

and therefore implies discounted value (present value) of the stream of benefits.\(^7\)

Income measurement focuses capital maintenance concept of business which may be (i) financial; (ii) general purchasing power financial capital maintenance; and (iii) operating. According to Financial concept, income is measured after maintaining the shareholder's equity intact. The General Purchasing Power Financial Capital maintenance concept aims at maintaining the purchasing power of the financial capital by continuously updating the historical cost of assets for changes in the value of money. According to Operating concept, income is measured after productive capacity of an enterprise has been maintained intact as it is helpful for users in predicting amounts, timings and risks associated with future cash flows and understanding enterprises performance in real terms.\(^*\)

### 1.1.2 MANAGEMENT OF EARNINGS

The term management of earnings means how the earning of a firm are utilised i.e. how much is paid to the shareholders in the form of dividends and how much is retained and ploughed back in the business. The way the companies apportion their earnings between dividends and retention is known as management of earnings.\(^*\)

A well established policy regarding management of earnings must be formulated to secure the maximum benefits to the body corporate and its owners. The prime criterion in this regard is the effect of its policy decision on the value of enterprise, viz., the cost of capital, its growth and the market price of its shares.\(^8\) A company that pays regular dividends and steadily augments its future earnings capacity through retention commands a respectable position in the market. Measurement of earnings includes the determination of profits, surplus and creation of reserves, whereas management of earnings assumes special importance with

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regard to provision of depreciation, declaration of dividend and ploughing back of profits. Thus, the enterprise must earn profits at a certain minimum rate. The rate of profit is justly regarded as an indicator of the progress of the enterprise and of the direction in which the company resources are utilised.¹¹

According to Drucker, the profits of concern should be sufficient to cover, (i) current costs of business; (ii) the future costs of staying in the business due to certain risks, that is, the risk of replacement, obsolescence, risk proper and uncertainty; (iii) to fill 'dry holes' as the productive well must compensate the loss of the pipe and labour wasted in a dry hole. Similarly, the profitable concerns must make good the losses of unprofitable concerns. A particular concern avoid these dry holes, but from social point of view, the society as a whole cannot ignore them. This is termed as insurance principle; and (iv) to bear the social burden the cost of social security must be met out of the profits of successful concerns. The social burden include defence, civil, administration, health services, education, relief's, old age benefits etc.¹²

The two opposite forces, the shareholders pressure for distribution of higher dividends and the concern's pressure for more retention of the same profits are to be mutually balanced. Depreciation policy forms an important part of the overall financial policy of an enterprise. The pattern and quantum of depreciation charged have a significant effect on the finances available to an enterprise and influence its dividend and retention policies. It affects both the inflow and outflow of funds. Decision on the choice of a depreciation policy does not depend merely on the change in the value of the assets, but also on other financial considerations, such as (i) amount of profits to be reported to the shareholders, (ii) the quantum of dividends to be paid, and (iii) the future programmes of expansion and growth.¹³

Depreciation policy affects investment decisions in two ways:

i) Effect on Supply of Funds: Depreciation is a capital recovery, and not income. It avoids double erosion. It is tax free and not available for distribution. Depreciation allowance are the largest source in business investment.

ii) **Effect on Attractiveness**: Depreciation is based on time, value of money. Higher funds available at an early stage, brings about faster recovery of investment. It reduces the risk of the investment project and the discount rate to be applied for the acceptance of the project.²⁴

The depreciation becomes a major factor because of the following reasons; (i) to know the true profit or loss; (ii) to show the true and fair view of financial position; and (iii) to provide funds for replacement of assets.²⁵ This is the reason why the study of depreciation policy is included in the present study.

The present study is limited to an analysis and discussion of the policy followed by the management's of the Punjab State Industrial Development Corporation promoted companies in public sector and joint sector with regard to Measurement and Management of earnings - especially the determination of profits, depreciation policies, dividend policies and policies regarding ploughing back of profits and to examine the effects of these policies on financial soundness of the companies.

1.2 **REVIEW OF LITERATURE**

Measurement and Management of earnings as a subject of study has attracted the researcher(s) both in developed as well as developing countries. The studies conducted by these researcher(s) throw light on the different aspects of Measurement and Management of earnings.

A brief survey of available literature in the area of Measurement and Management of earnings is presented below to provide a background to the study in two sections. The first section highlights some of the studies relating to Measurement and Management of earnings in developed countries, while the second section provides an overview of such studies in India in chronological order.

15. Ghosh P.K. ; "Depreciation - A Study"; The Management Accountant ; March 1987 ; Volume 22 ; No.3 ; PP 169-171.
1.2.1 STUDIES CONDUCTED IN DEVELOPED COUNTRIES:

Dobrovolsky (1951) analysed the factors influencing retained earnings by using regression analysis. The results of the study show that the amount of retained income of large manufacturing corporation depends to a large extent on current profitability, continuity of dividend policies and rate of operating assets expansion.16

Edward (1954) expressed his deep concern that if the depreciation charge did not reflect rising prices, total cost would be understated, profit would be overstated and a tax would be levied, in part on "real capital" rather than on "real profit". He suggested use of both current cost and adjustable historical cost for depreciation purposes.17

Miller and Modigliani (1961) in their most celebrated article, Dividend policy, growth and the valuation of shares; advanced the view that the value of firm solely depends on its earnings power and is not influenced by the manner in which its earnings are split between dividends and retained earning.18

Goldberg Louis (1962) made an endeavour to sort out some of the main concept of depreciation. He brought into focus four concepts of depreciation as (a) fall in price, (b) physical determination, (c) fall in value, and (d) allocation of cost.19

Blough Carman (1962) pointed out that depreciation provides no funds. Funds come from the revenues of the business and the charge for depreciation neither increases nor decreases the amount available to purchase a new equipment. Of course, if there remained revenues to offset the depreciation, an amount equal to the amount of depreciation for tax purposes would be left entirely to the business. Even such amounts would not be available for replacement unless the funds received as revenue were, in some way, set aside for the purpose. Making charge to income and

18. Miller and Modigliani; "Dividend Policy, Growth and Valuation of Shares"; Journal of Business; Vol.34; October, 1961; PP 411-433.
setting up reserves for depreciation would give no assurance of funds for replacement. Conversely, funds set aside for replacement would be available for that purpose whether charges were made for depreciation or not. The author emphasised that funding for re-investment was an independent purposive Act.*0

Charles (1966) clearly viewed depreciation simply as an accounting process of amortising the cost of an asset over the years of its life span. According to him, "depreciation cannot be both a source and use of funds - as a matter of fact it is neither." The accounting for depreciation was a matter entirely separate from that of making a decision regarding the replacement of property. He therefore, emphasised that depreciation, in fact, would not provide funds for replacement.*1

Higgins (1974) attempted to derive and test a finite-growth model for valuation of Electric Utility shares in years 1960-68. Primary attention has focused on the cost of equity capital to the industry; the specification of growth term, and the relationship between dividend policy and share prices. Model states that dividends do not increase share prices. In fact, the indication is that if there is any relationship at all between the variables, it is in opposite direction. This finding is significant when it arises in the face of at least two unfavourable conditions in which dividend and dividend yield are conventionally presumed to be major shareholders concern and it occurs inspite of potential bias inherent in informational content of dividends.*2

William and Kenneth (1990) attempted to find out morals and ethics, executives use to manage their businesses. Their study shows that corporate culture is more concerned with managing for excellence rather reporting short term profits will be less likely to support the widespread use of immoral earnings - management practices.*3

20. Blough G. Carman; "Depreciation - To Measure Income or To Provide Funds for Replacement"; PP 237-257.
through secondary compensation. A variation of residual income concept was used to develop control and motivation. The success of the programme could be measured only by levels of profitability and job satisfaction and both these measures showed a great value of program.*4

Richard (1993) introduced the Earnings Expectations Life Cycle and had suggested that the skill separating the good from bad value-oriented managers is that of buying; while the skill differentiating the good from bad growth-oriented managers is that of selling.*6

**FIGURE 1.2.1A: EARNINGS EXPECTATIONS LIFE CYCLE**

Enis Charles (1993) in his study indicated that Motor Carrier Industry that adopted bonus plans had outperformed the respective control firms during the post adoptive period. This relatively improved performance is not linked to reduction in capital or maintenance expenditure. Although the results for performance plan adopters are in the expected directions, they are not statistically significant.*6

Fang Chinh-Chiang (1994) examined three controversial and unsettled issues regarding the relationship between earnings and dividends. They are (i) the implication of dividend changes on future earnings; (ii) possible interactions between earnings and dividend signals; and (iii) the implication of dividend omissions on future earnings. The first study shows that the price reactions to dividend change announcements are positively associated with the changes in dividends.

24. Mosberg F. James; "Managing for Profit"; Management Accounting; Vol. LXXIII; No. 2; August, 1991; PP 50-53.
current annual earnings. The second study explores a situation in which earnings and dividend signals are not substitutes. The third study concludes that price adjustments to dividend omissions are positively associated with discounted future earnings. 

Stephen and Theodore (1997) demonstrated empirically that earnings computed according to Generally Accepted Accounting Principles (GAAP-Earnings) have properties necessary to serve as a substitute for dividends in equity valuation analysis. Dividends reduce subsequent GAAP earnings, and "intrinsic" equity prices calculated by forecasting earnings are thus reduced by current dividends. This behaviour is in accordance with Miller and Modigliani principles - the displacement property-which states that payment of dividends reduces prices. Further, the paper demonstrates that if this displacement is accommodated in calculating equity prices from forecasted GAAP-earnings those prices exhibit the dividend irrelevance property, that is, calculated prices are insensitive to future dividends.

Chamberlain Trevor (1997) utilised a single equation model and applied Neyman - Pearson Likelihood ratio test to find out that when individual firm data are considered, a direct measure of operating profit consistently out perform variables based on firm output and market value of firm's securities in explaining real investment. His study also focused on profitability in current or previous years and shows the results that profitability of earlier periods has little impact on current investment.

According to Swarup (1997), if the objective of firm is to maximise shareholders wealth, then the ideal position for the firm will be to pay high fully franked dividends. But when companies pay higher dividends they have to offer dividend reinvestment plans (DRPs) to retain some amount for future expansion.

27. Fang Chinh - Chiang; "Three Empirical Investigations into Earnings and Dividends"; D.A.I. 1994 ; Vol. 54 ; No. 07 ; P 2640 - A.
30. Swarup Santi K.; "Effect of Dividend Imputation on Australian Mining Companies"; Finance India; Vol. XI; No. 3; September, 1997; PP 654-655.
1.2.2 STUDIES CONDUCTED IN INDIA

Mehrotra (1952) evaluated the relative profitability of sales and the effect of taxation policy of government on profits and expansion of five industries namely Iron and Steel, Cement, Paper, Cotton, Textiles and Jute Textiles. His research shows that financial position of these industries had improved. The industries have also executed several modernisation and expansion schemes during the later stage, which increase their efficiency as well as output.*1

Talreja (1970) examined the level of earnings, the pattern of pay-outs and plough backs of private corporate sector in India, during the period 1959-68 of 419 companies. His study shows that state regulations governing, the raising of capital and distribution of profits, has improved the financial standing of private sector. The profit appropriation policies of medium and large scale companies were satisfactory, they could contribute considerably to capital formation. Small companies could not do so because of consistent pay-out policies, and lower and uncertain profits which are caused by adverse economic surroundings.*2

Lai (1970) attempted to examine the trends in retained earnings, which may be taken as the current sacrifice of dividends for the future cost free development programmes. Study based on a sample of 42 public limited companies both in public and private sector of Indian Coal industry, shows the downward tendency of retained earnings to the total resources, which was observed mainly due to (i) decreased profits caused by imbalance between demand and supply due to use of alternative sources of fuel, progressive dieselisation in railways, enhanced dearness allowance and wage rise given under second interim report of Central Wage Board (ii) increased quantum of dividends declared during the period.*3

33. Lal Chotte; "Trends In Retained Earnings In Public Limited Coal Companies In India"; Journal of Finance and Commerce ; Vol. 13 No. 8; August 1970 ; PP 693-700.
According to RBI Bulletin (1971) Rao and Sharma has studied three models namely (i) Lintner model, (ii) Cash flow model, and (iii) Depreciation model. All these models were fitted to the time-series data for corporate sector, major industrial groups and selected industries. And all these models were found to be adequate for explaining dividend behaviour in one or other industry.  

Goyale (1972) attempted to examine the depreciation tax laws of India compared with those of USA and UK from the view point of liberality of such laws. He observed that depreciation tax laws were most liberal in USA and tax payer was allowed to write off the cost of depreciable assets over as short a period as possible. In UK some degree of freedom is given to tax payer in adopting method of depreciation on machinery and equipment as well as in determining the rate of depreciation allowance. In India experiments were still there in making depreciation tax laws somewhat liberal in the light of experience of other two countries. 

R.M. Lall (1974) hypothesed that an investor compares the dividend yield on his investment in particular company with normal return he anticipate on his investment in similar companies with a view to find out whether it would be worthwhile to make an investment in that particular economy. He concluded that shareholder cannot look for anything except dividends that he may get and consequently for him the chief determinant of share value would be dividend payments.  

Shamsher Singh (1976) analysed the management of earnings in Uttar Pradesh State Road Transport Corporation (UPSRTC) and his study states that maximum coverage of earnings goes to operational costs and despite a huge balance of 'depreciation funds' ploughing back of profits is totally absent in UPSRTC. The corporation has to pay heavy sum in the form of interest every year to UTI, LIC, IDBI and other commercial banks. He has suggested to maintain 'Development fund' and 'Insurance reserve' and there should be provision for meeting contingent.  

35. Goyale R.N.; "A Comparative Study of Depreciation Tax Laws in India, USA and UK"; The Chartered Accountant; Vol. 21 ; No. 1 ; July, 1972 ; PP 7-16 
36. Lall R.M. ; "Dividend Yield Method of Share Valuation in Validity X-Rayed" ; The Chartered Accountant; Vol. 23; No. 5 ; November, 1974; PP 201.
expenses and it should improve its profitability in view of equity capital of State Government on which the dividend is likely to be paid.\textsuperscript{37}

Dhameja (1976) attempted to analyse the dividend policies and practices relating to equity shares. His study based on 158 listed non-government public limited manufacturing companies for the time period 1961-72, concluded that firms follow non-decreasing dividend policy and 88 percent firms follow a policy to cut dividend for a maximum period of two consecutive years.\textsuperscript{38}

Ojha (1976) attempted to analyse the impact of earnings, retained earnings and dividends on share prices in respect of 14 big sized cotton, textiles companies. The study shows that the liberal, steady dividend policy provides low cost capital and increased bargaining power at the time of merger and amalgamation of the company. It also provides increased return to shareholders in the form of dividend as well as increased share prices. The low cost capital enables companies to provide cheaper goods and services to the society. The liberal pay-out policy has greater relevance and importance in the companies having low growth potentiality and with yield oriented shareholders.\textsuperscript{39}

Dhameja (1978) studied 158 non-government public limited manufacturing companies listed on various Indian Stock Exchange(s) for examining the dividend behaviour of Indian companies by size (total assets and total sales), industry growth (in total assets and earnings per share) and control (as given in monopoly and enquiry report and Dutt Committee). He applied Lintner's model to the pooled data for the years 1963-72 and concluded that the Lintner's model is adequate to explain dividend behaviour.\textsuperscript{40}

\textsuperscript{37} Bahadur Shamsher Singh; "Management of Earnings (A case study of Uttar Pradesh State Road Transport Corporation)" ; A Survey of Research in Commerce and Management by M.Saeed ; Anmol Publications ; Vol. 2 ; 1952; PP 361-366.

\textsuperscript{38} Dhameja N.L. ; "Dividend Policy" ; Productivity ; Vol. 17; No. 3; October ; December, 1976; PP 341-367.

\textsuperscript{39} Ojha P.Raj ; "Impact of Earnings ; Retained Earnings and Dividends on Share Prices"; Journal of Indian Management (JIM); Vol. 15; No.6; October, 1976; PP 34-39.

\textsuperscript{40} Dhameja N.L. ; "Depreciation Practices and Dividend Decision in Joint Stock Companies"; Economic and Political Weekly (EPW); Vol. 14 ; March, 1979; PP M 47-53.
Khurana and Kumar (1979) analysed the determinants of dividend decisions in Indian Chemical Industry by directly approaching the companies with a non-disguised structured questionnaire. The results of analysis be summed up as; first both dividend and retained earnings decision variables are of equal importance in financial management and neither is by-product of other decision. Second, most of the companies follow target pay-out dividend policy and pay stable dividend to their shareholders. Third, increase in profits, better cash flow position and better reserves are significant factors resulting in increase in dividend. Other factors that influence decision making are lagged profits, dividends, share prices, amounts and cost of external funds, contingent liabilities, investors expectations, nature of shareholdings have been found to exercise very little influence on dividend decision making.41

Jinnah (1979) has made an effort with empirical data to find out the impact of various methods of depreciation accounting on the companies' tax liabilities, dividend policy, pricing policy and asset replacement policy and thus indicated the need for legislative change and Indian firms should be free to adopt any depreciation accounting method optimal for them.42

Basu (1979) looked at depreciation as generator of funds. He said, "Depreciation involves conversion of fixed assets into current assets just like fusion of ice into water and is a more substantial contributor of working capital than retained earnings......... Depreciation is a non-cash expenditure. Hence increase of depreciation expenditure implies increase of working capital". The quote represented the theme of his article.42

Bhole, L.M. (1980) using simple, multiple and stepwise regression analysis techniques, tested retained earnings, dividends and share prices of medium and large public limited companies and medium and large private limited companies in India for the period 1960-61 to 1975-76. He concluded that the single most important determinant of the saving ratio in case of medium and large public Limited


43. Basu P.C., "Role of Depreciation in Internal Financing". The Management Accountant, ICWAI, Calcutta; Vol. 14 ;No. 10 ; October, 1979 ; P 987.
companies is the net profits after tax (not the cash flow) while the factors which determine this ratio in case of medium and large private limited companies are the cash flow availability and cost of external funds and the price level. He also concluded that Lintner's model did not perform well during the period of study.\textsuperscript{44}

Jagan Nath Goel (1981) attempted to examine the (i) importance of earnings and profitability in Pharmaceutical Industry; (ii) dividend pattern and pay-out ratio; (iii) depreciation policy and its effects on funds generated; and (iv) retention policy and comparative effects of dividends and retained earnings on the market value of shares. Primary data has been collected for the period 1969-78 of 10 companies of Pharmaceutical Industry. The study shows that industry followed a stable dividend policy with gradual rise. The bonus issues were adhoc decisions dependent upon the amount of earnings to be capitalised. The dividend tend to affect the market value of shares more effectively than the retained earnings.\textsuperscript{45}

Malodia (1982) investigated the changes in the investment turnover, the profit margin, return on investment, and other measures of profitability from owner's point of view such as earning per share, dividend per share, dividend pay-out ratio and market test of three engineering units Kota, Palghat and Rajasthan. His study shows that the proportion of inventories in total assets was increasing in all selected concerns. The gross margin was lower in private concerns as compared to public. The under capacity utilisation had adversely affected the overall profitability of all selected concerns due to acute power shortage and agitation, and go slow tactics by employees.\textsuperscript{46}

According to Agrawal (1982-83), the basic objective in all dividend actions; whether it is skipping dividend, or high or low pay-out ratios, or high or low dividend rates, or effecting change therein, is to maximise the net worth of the firm.\textsuperscript{47}

\textsuperscript{44} Bhole L.M.; "Retained Earnings, Dividends and Share Prices of India Joint Stock Companies"; Vol. 15 ; No. 27-52 ; August, 1980 ; PP M93 - M100.

\textsuperscript{45} Goel Jagan Nath ; "Management of Earnings in Pharmaceutical Industry" ; A Thesis submitted to Department of Commerce & Business Management, Panjab University; November, 1981.

\textsuperscript{46} Malodia G.L. ; "Profitability Assessment of Engineering Industry in India" ; A Survey of Research in Commerce and Management by M.Saeed ; Anmol Publications ; 1990; Vol.5 ; PP 135-147.

\textsuperscript{47} Dr. Agrawal N.K.; "Determinants of Dividend Policy"; The Chartered Accountant; Vol. 32 ; 1982-83 ; PP 631-635.
Sen (1983) has introduced the model of Depreciation, which takes into account the effects of inflation capitalised expenditure, devaluation of currency, re-estimated useful life expectancy and salvage value. In the model, written down value of asset at the beginning of particular year is reappraised for inflation during the year and its further useful life is also re-estimated taking into account the actual use of asset and the other factors. The amount of depreciation is calculated on the basis of this re-appraised written down value (WDV) and fraction of its expected working life for which it has been used during the year.48

Jha's (1985) study revealed that on account of mounting inflationary pressure, the depreciation based on historical cost becomes quite inadequate to replace assets. The two possible alternatives can be thought of e.g., linking depreciation to the index of machinery prices or allowing free depreciation as done in United Kingdom. It is not only sufficient that we make adequate provisions for depreciation rather it is significant that magnitude of retention is determined in the background of development or expansion plan of the corporation. But the magnitude of retention would depend on the rate of profitability.49

According to Sen (1986) Depreciation can be said to have an impact on cash flow and restricts cash outflow by reducing; (a) tax payments; (b) contribution to national exchequer (dividend); and (c) contribution to worker's profit participation fund.50

Ravindra (1989) has summarized the various works which highlight the different determinants of dividend decision. LINTNER states that dividends represent primary and active decision variable while retained earnings are largely a by product of dividend actions. J.A.BRITTAIIN's study shows that cash flow was singled out as most significant factor, affecting dividend policy. DOBROVOLSKY found that dividends to be negatively and significantly associated with expansion requirements.


49. Dr. Jha S.M.; "Management of Internal Resources in Government Corporations"; Bihar University; Indian Journal of Commerce; Vol. XXXIX; Part 4; No. 145; October - December, 1985; PP.57-62.

50. Sen Dilip Kumar; "Depreciation: It's Impact on Cash Flow; A Case Study"; The Management Accountant; Vol. 21; No. 2; February, 1986; PP 109-110.
measured by actual growth of operating assets. DHRYMES and KURZ have shown extensive consideration to the impact of investment on dividend behaviour. External finance is another important determinant of dividend behaviour as the availability of external finance could bolster dividends in line with planned dividend payments in situation of low profits and extensive investment programmes.*1

Rai (1990) attempted (a) to examine the pattern of income earned and expenses incurred by Life Insurance Corporation (LIC) of India, and (b) to advance suggestions for maximising income and minimise expenses over the period of twenty five years. Research shows that income has risen faster than the total outgo, which has enabled the Life Insurance Corporation (LIC) to transfer more and more amounts to its Life Insurance Fund and the share of central government in valuation surplus has been higher and it needs to be reduced.*2

Pandey and Surya Bhan Singh (1990) had evaluated the extent of financing through retained earnings; and the impact of taxation and dividend policies on retained earnings in the public and private corporate sector in India. They concluded that the magnitude of retained earnings depended on a number of factors. The most important ones were found to be the level of earning of an enterprise, the government's taxation policy and the corporate dividend policy.*3

Kothari (1991) have examined the Depreciation accounting for plants, trees etc. and his study revealed that they depreciate by (1) efflux of time; (2) use; and (3) obsolescence and suggested the suitable rates provided by Centre Government by general order for different kind of trees.*4

Mittal (1992) examined whether the decision of retained earnings a primary decision variable or a residual one and to measure the impact of net-income and profitability, corporate tax, liquidity requirements, growth rate, debt-equity ratio, need

51. Gupta Ravindra Kumar; "Determinants of Corporate Dividend Policy"; The Management Accountant; Vol. 24; No. 6; June, 1989; PP 377-378.
52. Rai O.P.; "Income and Expenses Patterns of Life Insurance Corporation of India"; A Survey of Research in Commerce and Management by M.Saeed; Anmol Publication; Vol. 3; 1990; PP 45-48.
54. Kothari Dev Kumar; "Depreciation Accounting for Plants, Trees, Bushes, Shrubs etc."; The Management Accountant; Vol. 26; No. 7; July, 1991; PP 533-535.
for investment in fixed assets for replacement, expansion and modernization, interest burden and inventory requirements on retained earnings. The study shows that (i) the retained earnings decisions is a residual one since there are lowest variations in dividends paid and largest variations in retained earnings in large textile companies; (ii) current ratio has most significant effect on retention ratio; (iii) debt-equity ratio and corporate tax have a depressing effect on retention ratio; and (iv) desire to hold excessive inventories and to avoid interest-burden has not significantly induced the management to retain more profits."

Rao and Alok's (1993) study revealed that the objective of bonus issues are (a) to bring the recorded capital in line with employed capital to set apparent excessive rate of dividend to fair normal return and thereby avoid possible "heart burning" of labour and entry of new entrepreneurs; (b) to narrow the gap between company's paid-up capital and its block (fixed assets); (c) to reduce the market value of shares; (d) to preserve their marketability; and (e) to raise capital by conserving cash for expansion etc."

Yadav and Raj (1993) both examined the various causes responsible for industrial sickness like wrong selection of consultant, Managing Director's interference, omission of marginal contribution concept, by-passing phenomenon etc. Concludingly the authors said that even after the best efforts, these few unforeseen reasons led to healthy unit to a crippling one."

Chandretre's (1994) study revealed that issue of the bonus shares is permitted only out of free reserves which are built up from genuine profits of the company or from the share premium collected in cash only and the reserves created by revaluing the existing assets directly or indirectly is not available for capitalisation."

55. Dr. Mittal R.K.; "Determinants of Corporate Retained Earnings"; Kurukshetra University; Indian Management; Vol. 31 No. 3; June, 1992; PP. 35-38.
56. Dr. Rao P. Mohana and Sri Pramanik Alok; "Issue of Bonus Shares - A Critique"; The Indian Journal of Commerce - a quarterly of Indian Commerce Association; Vol. XLVI; Part III; September, 1993; No. 176; PP 61-73.
57. Dr. Yadav P.K. and Mr. Kamal Raj; "Industrial Sickness - The Unforeseen Reasons (a case study)"; The Indian Journal of Commerce; Vol. XLVI; Part III; September, 1993; No. 176; PP 26-29.
58. Chandretre K.R.; "Bonus Issue out of Revaluation Reserves" (Company Secretary and Vice President of Kirlosker Oil Engines Limited, Pune); Chartered Secretary; Vol. XXIV; No. 7; July, 1994; PP 613-617.
Subramaniam's (1995) study revealed that the objective of providing depreciation is to provide sufficient funds to replace the asset used for business after the useful life of asset. His study shows that depreciation rates always keep on changing from time to time so it becomes a debatable issue.9

Mishra and Vunyale (1996) attempted to find out dividend behaviour and pattern of State owned enterprises (SOEs) in India. The study depicted that number of dividend paying state owned enterprises in India is comparatively small compared to total number of profit earning state owned enterprises. In majority of state owned enterprises, the dividend has remained stagnant irrespective of continuous increase in earning per share (EPS). The overall group analysis shows that earning per share (EPS) is a major factor in deciding the dividend rate.9

Davashis Mitra (1997) examined a sample of firms which declared specially designated dividends (SDD's). His findings suggest that (a) specially designated dividends (SDD's) announcements provide useful information to the market and (b) last of recurring series of specially designated dividends (SDD's) announcement conveys less information than first, presumably because of greater market anticipation.9

Jaspreet (1997) analysed the dividend policy and practices in selected Indian industries by determining the relative significance of factors' having a bearing on dividend policy decision of the companies. Her study shows that besides earnings and previous year's dividend, tax consideration influenced a dividend policy significantly. Due to the availability of tax concessions for retained earning, high income bracket shareholders require the management of the company to retain a high percentage of profits.9

Vijaya Kumar's (1998) study revealed that the growth is found to be significantly associated with profitability. There are some inter-industry variations of relative importance of factors affecting corporate growth. This is probably because

59. Subramaniam R. Hanhara ; "Depreciation - A Debatable Issue" ; The Management Accountant ; Vol. 30 ; No. 6 ; June, 1995 ; PP 428-429.
60. Mishra S. Chandra and Narender Vunyale, "Dividend Policy of SOEs in India-An Analysis" ; Finance India ; Vol.X No.3 ; September, 1996 ; PP 633-645.
61. Mitra Devashis ; "The Information Content of Specially Designated Dividend Announcements"; Journal of Business; Vol. 33 ; No.1; March,1997 ; PP 37-47.
different industries face varying degrees of demand conditions, competition and government controls.**

Kulshrestha (1998) attempted to throw light on the difference between accounting and economic concepts of profit and see if the gap between two can be narrowed down for the development of both the branches of knowledge on scientific lines. He suggested that accounting terminology as related to concept of profit requires a change. The economist idea of goods to goods profit may not be practicable but the adoption of the principle of replacement cost and giving due consideration to inflation and deflation in accounting will enhance the usefulness of the subject not only to the business and the management but to the society as a whole. Then only, it will be in a position to rank among social sciences and be a worthy partner of economics in building the economy of the nation.**

Banerjee and Jain (1999) attempted to study the relationship between shareholders wealth and certain financial variables. As economic value added (EVA) technique for measuring business income was introduced in 1990, his study concluded that economic value added has proved to be most explanatory variable and capital productivity is the predictor of shareholders wealth.**

1.2.3 SUMMARY OF MAIN FINDINGS OF THE REVIEW OF LITERATURE

The main findings of various studies conducted on Measurement and Management of earnings i.e. Income expenses pattern, dividend declaration, depreciation provision, retained earnings, bonus issue etc. in India and abroad can be stated as follows:

1. There are large number of factors which had adversely affected the overall profitability of the concerns. In order of importance, these are; under capacity utilisation, agitation and go-slow tactics by employees, current profitability, pay-out ratio and the shareholder's and management's attitude.

63. Dr. Vijaya A. Kumar ; "Determinants of Corporate Size, Growth and Profitability- The Indian Experience"; The Management Accountant ; Vol.33 ; No. 5 ; May, 1998 ; PP 327-329.
64. Kulshrestha H.S. ; "Accounting and Economic Concepts of Profit"; The Chartered Accountant ; Journal of Institute of Chartered Accountant of India ; July, 1998 ; PP 140-144.
2. The studies conducted both in India and abroad revealed that the depreciation rates always keep on changing from time to time, so it has become a debatable issue in the concerns.

3. No general agreement on the set of factors influencing dividend policy is found. Different authors have been using different combinations of variables for explaining dividend behaviour. However, the profitability and investment needs are the common explanatory variable of dividend policy, and have been used in almost all studies.

4. Various studies do not have a consensus on Modigliani and Miller's hypothesis. Some studies support the MM hypothesis, whereas there are studies which do not support this hypothesis and report that there is a relationship between dividend policy and the value of firm. The value of firm depends solely on its earnings power.

5. The bonus issues are the adhoc decisions, as they are dependent upon the amount of earnings to be capitalised, and retained earnings are largely a by product of dividend actions.

6. Regarding statistical research methodology, majority of the researches conducted in India uses statistical methods of tabulation, analysis, partial correlation and regression equations. Ratios and percentage have been worked out to analyse the trends. But the researches conducted in Foreign countries, apart from regression analysis, they have used other tools of analysis like earnings expectation life cycle, finite-growth model, simultaneous equation model, single equation model and Neyman-Pearson likelihood ratio test's etc.

1.3 NEED FOR THE PRESENT STUDY

A brief perusal of review of literature brings home the fact that there have been studies conducted in the past, which have studied different aspects of Measurement and Management of Earnings such as profitability measurement, depreciation accounting, dividend determination etc., in public and private sector both in India as well as abroad. The question which overpowers a discernible mind is that why there is a need for the study on a subject which has been widely researched. This question can be answered by advancing the following arguments.

1. With the growth in economic activities of the corporations both in public as well as private sectors, their earnings have grown tremendously. Problem of
ascertainment and appropriation of the corporate earnings has become of topical interest, because corporations have (1) to pay steady dividends to keep their shareholders satisfied and at the same time; (2) plough back profits for short and long-term requirements. Divergent views are expressed regarding appropriation of earnings. Industrialists and the techno-structure of the companies favour adequate retention for financing the expansion, modernisation of the business, whereas the professional shareholders want that the entire profits should be distributed as dividend and all investments effected through the capital market. Therefore, an attempt is made to study how efficient management has to balance these forces while recommending pay-outs and plough backs.

2. The Corporations are expected to earn a satisfactory rate of return on funds made available to them and would not part with the profits so long as they possess an opportunity for more profitable use of funds, but for the payment of dividend at minimum or normal rate on paid-up capital. In other words, low rate of dividends can be justified on the ground of earning a higher rate to return on ploughed back profits. Therefore, an effort should be made to enquire in efficient use of resources including surplus funds resulting from profitable working of the corporations which can maximise the economic welfare of shareholders, workers, consumers and society at large.

3. Punjab State Industrial Development Corporation Limited (PSIDC) at present, has promoted companies in various sectors of economy of Punjab. It has rendered a yeoman's services for the economic development of the state of Punjab. Companies promoted by Punjab State Industrial Development Corporation have done reasonably well on profitability. So far, no study has been conducted to examine the measurement and management of earnings in Punjab State Industrial Development Corporation promoted companies in various sectors. This study is an attempt to fulfill this void.
1.4 OBJECTIVES OF THE PRESENT STUDY

The present study aims at examining the measurement and management of earnings of Punjab State Industrial Development Corporation Limited (PSIDC) promoted companies in Public and Joint Sector. In this context, the principal objectives of the study are delineated below as:

1. To examine the accounting policies concerning measurement of earnings in the companies under study.
2. To examine the pattern of income earned and expenses incurred by the companies under study.
3. To study the depreciation policies of the companies under study and the effect of depreciation policies on the funds generated.
4. To study the dividend policy/retention policy of the companies under study and the factors affecting such policies.
5. To study the considerations governing the capitalisation of earnings through the issue of bonus shares by the companies under study.

1.5 SCOPE OF THE PRESENT STUDY

The present study aims at examining the measurement and management of earnings in Punjab State Industrial Development Corporation promoted companies in various sectors. Till March 1998, Punjab State Industrial Development Corporation has promoted 264 projects in Public Sector, Joint Sector and Assisted Sector in total. All the companies promoted by Punjab State Industrial Development Corporation have been functioning for the considerable period of time. In Joint and Assisted sectors, some of the companies are not fully operational, and some of them are in establishment stage. For the present study, only the well established companies having a track record of at least six years have been included. Thus, in the present study, all the five Public Sector Companies, five out of nine Joint Sector Companies have been considered for examination of measurement and management of earnings. The study covers a period of six years commencing from 1992-93 to 1997-98. The reason for selecting five out of nine Joint sector companies is that, some of companies are suffering losses and not able to provide the information in the form of annual reports and through personal interviews and some of the companies had
started their commercial production late i.e after the year 1992-93. The following companies are taken for study in Public and Joint Sectors, promoted by Punjab State Industrial Development Corporation (PSIDC).

IN PUBLIC SECTOR
1. Punjab Tractors Limited.

IN JOINT SECTOR
1. Alpha Drugs India Limited.

1.6 RESEARCH METHODOLOGY

1.6.1 DATA COLLECTION:
For fulfilling the objectives of the study, the requisite data have been collected both from primary as well as secondary sources. Secondary data was collected from the Annual Reports of the companies under study and other published and unpublished documents of Punjab State Industrial Development Corporation and Government. For collecting primary data, two questionnaire's one each for measurement of earnings and management of earnings were prepared. These questionnaires included the questions concerning different aspects of measurement and management of earnings. With the help of these questionnaires, the requisite information was collected from the members of Board of Directors and others managers of the companies under study. Personal interviews were also conducted wherever required, to cover some qualitative aspect. The information so collected was suitably classified and tabulated to make the analysis possible.

1.6.2 TOOLS FOR ANALYSIS:
In the present study, use of both the financial and the statistical analysis techniques have been made. In addition, use of diagrams and charts was also made to highlight the main findings.

1.6.2.1 FINANCIAL ANALYSIS TECHNIQUES: The financial analysis techniques to be used in the present study will consist of ratio analysis, and analysis of funds from operation.

A) RATIO ANALYSIS: In financial analysis, a ratio is used as an index or yardstick for evaluating the financial performance of an enterprise. Thus, the following ratios would be calculated for all the companies individually and for companies considered as a group to analyse and interpret accounting results of an entity.

1) PROFITABILITY RATIOS: The profitability of an enterprise may be measured in two ways; (i) Profitability in relation to Sales; (ii) and Profitability in relation to Investment. Profitability in relation to sales indicates the amount of profit per rupee of sales. If sales do not generate sufficient profit, a firm or an enterprise may find it difficult to cover operating expenses and thus fail to earn sufficient profits. Similarly, profitability in relation to investment indicates the amount of profit per rupee invested in assets and if a company is not able to earn satisfactory return on investment, it will not be able to pay a reasonable return to its investors and the survival of company may be threatened. To know profitability of the company, the managerial performance and efficiency of the companies the following ratios would be calculated.

a) Net Profit as Percentage of Sales: Net Profit is the margin left with company after all expenses or costs have been met. This ratio can be calculated with the help of Net Profit and Net Sales. This ratio measures the overall profitability of a company. It indicates a company's capacity to withstand adverse economic conditions. Higher is the ratio, better would be the earning position of the company. Higher margin implies efficient managerial performance, sufficient return to the owner's equity and ultimately determines the survival of the entity.

\[
\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100
\]

\[
\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100
\]
b) Net Profit as Percentage of Net Worth or Return on Investment: It measures the ratio of profits earned on proprietorship capital. The basic components of this ratio are net profits and shareholder's funds. Shareholder's funds or Net worth include equity share capital, preference share capital, free reserves such as premium, revenue reserve, capital reserve, retained earnings and surplus less miscellaneous expenditure and accumulated losses. This ratio can be calculated as follows:

\[
\text{Net Profit as % of Net Worth} = \frac{\text{Net Profit}}{\text{Net Worth}} \times 100
\]

This ratio depicts the profit earning ability of the company. It can be stated that higher the net profit to net worth ratio of a company, more would be the earning capacity of the company and ability to pay the dividends.

c) Net Profit as Percentage of Paid-up Capital: This ratio has been calculated to show the profitability on per share basis. Paid up capital has been taken for the simple reason that it represents the figure actually received and used by the concern after calls in arrears are deducted from it. This ratio can be calculated as follows:

\[
\text{Net Profit as % of Paid-up Capital} = \frac{\text{Net Profit}}{\text{Paid-up Capital}} \times 100
\]

The higher ratio denotes the success of the entity in attaining its objective, the lower ratio indicates the inefficiency of management.

2) RATIOS REGARDING DEPRECIATION AND AMORTIZATION: Depreciation means the process of allocation of the cost of fixed assets over the periods in which services are received from the asset. As the main objective of providing depreciation are (I) to calculate the proper amount of profit; (ii) to show assets at correct value; and (iii) to provide funds for replacement of assets. The amortization of fictitious and intangible assets is similar to the depreciation allocations of fixed assets. While amortizing the fictitious and intangible assets the major factors to be estimated are (i) the useful life of the asset, and (ii) the pattern of allocation to the several periods of the life of the asset. The following ratios would be calculated for this purpose.

d) Depreciation Provision to Internal Funds Generated: Depreciation implies the release of funds locked up in fixed assets for current operations. The supply of
internal funds depends upon the rate of release of funds from fixed assets through 
depreciation provision. Thus, the ratio would be calculated as follow:

\[
\text{Depreciation Provision to Internal Funds Generated} = \frac{\text{Total Depreciation Provision}}{\text{Total Internal Funds Generated}} \times 100
\]

The higher the rate of release of funds from fixed assets through depreciation 
 provision, the greater would be the amount of internal funds generated and otherwise 
 vice-versa.

(e) **Amortization Provision to Internal Funds Generated**: Fictitious and 
 intangible assets that are acquired through a lump-sum purchase or that are 
 developed through extraordinary identifiable expenditures are frequently capitalised 
 and amortized similarly to depreciation allocation. Thus, the supply of internal funds 
 depends upon the rate of release of funds from fictitious and intangible assets 
 through amortization provision.

\[
\text{Amortization Provision to Internal Funds Generated} = \frac{\text{Total Amortization Provision}}{\text{Total Internal Funds Generated}} \times 100
\]

The higher the rate of release of funds through amortization provision, the 
greater would be the amount of internal funds generated and otherwise vice-versa.

3) **RATIOS REGARDING DIVIDEND POLICY AND PAY-OUT PATTERN** : Dividends 
are that portion of a concern's earnings which is paid to its shareholders. 
Company's has to decide what percentage of earnings is to be paid to the 
shareholder's as dividend and what percentage is to be retained in the business for 
re-investment. Thus, dividend payments by a company are influenced by the profits 
of the company. The following ratios would be calculated for this purpose.

f) **Dividend to Net Profit Ratio**: As dividends are the portion of profits 
distributed among the shareholders, the amount of dividend payment depends upon 
the profit earning capacity of the firm. Dividend to Net Profit ratio or Pay out ratio can 
be calculated as below:

\[
\text{Dividend to Net Profit Ratio} = \frac{\text{Dividend}}{\text{Net Profit after taxes}} \times 100
\]

Higher dividend to Net Profit ratio indicates that higher is the expected 
dividend payments on the share of a company, as the company's earning capacity is 
increasing.
g) **Dividend as Percentage of Paid-up Capital:** The shareholders are more interested in the profitability of the company and the performance of a company should be judged on the basis of return on capital of the company. Dividend as percentage of paid-up capital ratio looks at dividend in relation to total of the permanent funds invested in an enterprise.

\[
\text{Dividend to Paid-up Capital ratio} = \frac{\text{Dividend}}{\text{Paid-up Capital}} \times 100
\]

As the ratio reveals how well the resources of the company are being used. Higher the ratio, better are operating results of a company in terms of efficiency and profitability, and vice-versa.

h) **Dividend to Equity Ratio:** In real sense, the ordinary shareholders (Equity shareholders) are the real owners of the company. They assume higher risk in the company. In this ratio equity refers to the entire claim of the equity share holders which is paid-up equity capital plus all reserves (except gratuity reserve) minus miscellaneous expenditure. Dividend to equity ratio can be calculated as below:

\[
\text{Dividend to Equity Ratio} = \frac{\text{Dividend}}{\text{Equity Capital}} \times 100
\]

The ratio depicts the profit earning ability of the firm and the real owners of the company. Higher the ratio, more efficient and profitable the company is, otherwise vice-versa.

4) **RATIOS REGARDING BONUS ISSUE:** Bonus share are allotted to existing equity shareholders of the company without any consideration, either in cash or in kind. This bonus issue amounts to reduction in the amount of accumulated profits and reserves and thereby their is corresponding increase in the paid up share capital of the company. Regarding Bonus issue, the following ratios can be calculated.

i) **Ratio of Bonus issue to Equity Capital:** This ratio is calculated as follows:

\[
\text{Bonus to Equity Ratio} = \frac{\text{Amount of Bonus Share}}{\text{Amount of Equity Share Capital Before Each Bonus Issue}} \times 100
\]

Higher the ratio, more satisfactory position of the company is, as issue of bonus share results in capitalisation of profits and reserves of the company.
j) **Bonus Ratios**: To find out whether companies prefer any particular ratio while capitalising the reserve, the bonus issue ratio's table would be prepared. The regularity, periodicity and frequency of the bonus shares issued is to be known through the bonus ratio table.

k) **Reserves to Equity Ratio**: This ratio establishes the relationship between reserves and equity share capital. The ratio indicates that how much profits are generally retained by the firm for future growth in the form of reserves and surpluses, and is to be calculated both before the bonus issue and after the bonus issue.

* Before the Bonus shares issue, ratio is calculated as:

\[
\text{Reserve-Equity Ratio} = \frac{\text{Reserves}}{\text{Equity}} \times 100
\]

(Here equity denotes the Equity share capital)

Higher the ratio, generally better is the position of company.

* After the Bonus shares issue, ratio is calculated as:

\[
\text{Reserve-Equity Ratio} = \frac{\text{Reserves}}{\text{Equity}} \times 100
\]

(Reserves include the reserves of next year also, and equity share capital includes fresh issues to the shareholders).

If the reserve equity ratio after the bonus issue is higher, the owners can improve the position of their company by capitalizing more reserves. Otherwise there is deterioration in company's efficiency and profitability.

5) **Ratio Regarding Retention Policy**: Due to fluctuations of profits in the company, the amount of retained earnings also undergo fluctuations. The management ploughs back the profits in the form of reserves and surpluses for further development, expansion and modernisation of the company. The following ratios would be calculated for this purpose.

l) **Retained Earnings as Percentage of Net Earnings**: Retained earnings increases with the increase in net earnings and decreases with fall in them. This ratio is calculated as follows:

\[
\text{Retained Earnings to Net Earnings ratio} = \frac{\text{Amount of Retained Earnings}}{\text{Net profit after taxes}} \times 100
\]
Higher ratio means that more will be the earnings retained by the company for future expansion programmes of the company, consequently the profitability of the company is also expected to improve.

m) **Retained Earnings to Internal Funds Generated**: How much internal funds are generated through the plough back of the profits by the company is calculated from the following ratio:

\[
\text{Retained Earning to Internal Funds Generated} = \frac{\text{Amount of Retained Earnings}}{\text{Total Internal Funds Generated}} \times 100
\]

This ratio can be interpreted as higher the ratio more will be the earnings retained for generating internal funds of the company otherwise vice-versa.

n) **Retained Earnings as Percentage of Gross Asset Expansion**: While analysing the retained earnings or internal funds generation in financing for expansion, further development and modernisation of the company, the ratio for gross assets expansion can be calculated as follows:

\[
\text{Retained Earning to Gross Asset Expansion Ratio} = \frac{\text{Total Amount of Retained Earnings}}{\text{Gross Asset Expansion}} \times 100
\]

This ratio can be interpreted as, higher the ratio more will be the assets purchased by the company for further expansion, development and modernisation of the company with the help of retained earnings.

B) **ANALYSIS OF FUNDS FROM OPERATION**: The accounting concept of profit is significantly influenced by accounting policies and practices followed by a business enterprise. The reported accounting profits of two identical business organisations may be different simply because of using different accounting policies and practices. Therefore to compare the performance of different organisations, the concept of funds from operation may be more useful. This concept is not influenced by the accounting policies adopted by a business organisation, as it is based upon matching business expenses resulting into outflow of funds with business revenues resulting into inflow of funds. Funds from operation are computed by adding non-cash and non-operating expenses to the figure of profit before tax and deducting non-cash and non-operating revenue from the resultant total.
1.6.2.2 STATISTICAL ANALYSIS TECHNIQUES: Statistics the science of estimates and probabilities presents the facts in definite form, simplifies mass of figures, facilitates comparison, helps in prediction and formulation of policies. The Statistical techniques viz.; Arithmetic mean, coefficient of correlation and T-test have been used for present study to analyse and interpret the data.

1.7 CHAPTER SCHEME

The present study is divided into six chapters. The study begins with the Introduction to measurement and management of earnings, review of literature and research methodology in Chapter-I. Chapter-II gives an account of various approaches to measurement of earnings. Chapter-III presents the accounting policies for measurement of earnings and the reporting practices adopted for measurement of earnings by the companies under study. Chapter-IV presents the analysis of the profitability of the PSIDC promoted companies under study and also presents the analysis of the share of depreciation and amortisation of fictitious and intangible assets in the funds from operations of the companies under study with a view to determine the extent to which the financial results of these companies are influenced by these items. Chapter V presents the management of earnings i.e. the policies and practices regarding the payment of dividends, bonus share issues and retained earnings of companies under study. Chapter VI presents the summary, conclusions and suggestions for further research.