CHAPTER-3

RESEARCH METHODOLOGY

3.1 Problem Identification

The Indian textile industry is the second largest in the world-second only to China. Indian textiles also account for 38 percent of the country’s total exports and are therefore, a very important industry. The forecast is that textiles exports will reach USD 35 billion by the years 2012. To sustain this growth, it is imperative that the textiles industry produces goods of high quality at reasonable prices. This means that the industry must continuously moderate its machinery. Therefore, the textiles machinery industry sector has an integral role to play in the growth of India’s export industry. Analysts note that textile prices are increasingly competitive worldwide as more and more developing countries enter the global textile trade. To maintain if not increase, its global market share, the Indian textile industry must procure modern, low-cost, textile machinery so that it can produce high quality textiles and garments for export at competitive prices. It is in this context that the market for used textile machinery is viewed as very promising used textiles machinery permits India to incorporate new technology at low cost. Here are a few important facts about India’s textile:
1. There are approximately 1200 medium to large scale textile mills in India. Twenty percent of these mills are located in Coimbatore (Tamilnadu).

2. India has 34 million cotton textile spindles for manufacturing cotton yarn. Cotton yarn account for 70 percent of India’s textile exports (China has 40 million cotton spindles.)

3. Of the Indian textile yarn exports, almost 80 percent come from coarser yarns (counts below 40s). Consequently, there is a need to upgrade the technology.

4. For the past two years, there has been a significant slow-down in the cotton spinning segment, mainly due to the spiraling price of cotton.

5. The domestic knitting industry is characterized by small scale units which lack adequate facilities for dyeing processing and finishing. The industry is concentrated in Tirupur (Tamilnadu) Ludhiana (Punjab). Tirupur produces 60 percent of the country’s total knitwear exports. Knitted garments account for almost 32 percent of all exported garments. The major players include Nahar spinning, Arun processor and Jersey India.

Financial soundness of a business enterprise largely depends upon the liquidity, productivity and profitability of the business enterprise. The liquidity can be achieved by managing the different parts of working
capital such as receivable management, cash mgmt. and proper debt collection policy. An output is obtained by the combined input of a number of factors like labour, material, capital, land and organization. The ratio between output and one of these factors of input is generally known as the productivity of the factors considered, the ratio between output and all these factors is known as total productivity. It is considered as a measure performance of the economy as a whole. In the broadest concept, productivity may be taken to constitute the ratio of all available goods and services to the potential resources of the group of the country. The problem of increasing productivity implies the full proper and efficient utilization of the available resources of men – machines – money – power – land – capital etc. Productivity cannot have a mask attack on wastage of every type and in every sphere. It constantly urges to find better, cheaper, quicker, easier and safer ways of doing job, manufacturing a product and providing a service. It aims at the maximum utilization of resources for yielding as many goods and services as possible, of the kinds most wanted by consumers, at the lowest possible cost. The profitability can be achieved after control over the cost of production. In recent years, cost of almost all elements of production like cost of raw material consumed, wages cost, excise duty, power and fuel cost, interest burden, administrative expenses, selling and distribution expenses etc. have increased heavily. On the other hand, selling price of
cement, textiles, automobiles, woolen, engineering, tea, paper, and chemical products has decreased. In these circumstances, to keep the progress of business enterprise is very essential for management in present environment, to achieve the profit it tends to introduce various control techniques over expenditure and get maximum output.

A study of productivity and financial efficiency classified on the basis of persons interested in the analysis. Generally external and internal parties are interested in such analysis of study. Objectives of both these analysis are different. An external analyst has to depend upon the published information of financial statement, which is not enlightening them. While internal analysis knows every thing regarding the information provided in the financial statements.

Different analysts always make analysis or study of financial performance knowingly, generally, external analyst’s analysis of the information as per their requirements. Financier is interested in the financial and liquidity position. A shareholder is interested in the profitability. Management is interested in the productivity and operational efficiency. Thus various stakeholders of business enterprise like management, investors, bankers, financial institutions, creditors, employees, government, economists, prospective investors etc. look at liquidity, profitability and productivity of the business concern.

87
3.2 Survey of the Existing Literature:

There is wide range of literature available on financial performance analysis of different companies in conforming to its dynamic value and significance of intuitive nature. A good dealing in analytical part of literature exists at broad levels like size and technology, problem associated with productivity, financial performance, and capacity utilization. Relevant existing literature and studies have been clipped below. A researcher has studied this literature for gaining insight into the problem.

In the year 2002, Dr. Sugan C. Jain has written a book on “Performance Appraisal Automobile Industry” In his study, he has analyzed the performance of the Automobile Industry and presented comparative study of some national and international units. The operational efficiency and profitability had been analyzed using the composite index approach. He made several suggestions fro the strengthening the financial soundness improving profitability, working capital the performance of fixed assets.

Ahindra Chakrabati published an articles “Performance of Public Sector Enterprises - a Case study on Fertilizers” in “The Indian Journal of Public Enterprise” in the year 1988-89. He made analysis of consumption and production of fertilizer by public sector; he also made analysis of
profit and loss statement. He gave suggestions to improve the overall performance of public enterprise.

Miss Nandini Jaimini published an article “Evaluation of Cash Management Performance of the Selected Textiles Mills in Rajasthan” in “Indian Journal of Public Enterprise” in 1988-89. She made analysis of selected textiles units by using various liquidity ratios and concluded that the inadequate cash balance to meet their currently maturing obligations. She suggested various measures to overcome this deficit of working capital.

Recently in the year December 2002, a study was made by Prof. Manish M. Chudasama on “Analysis of Cost Structure of Indian Textiles Industry” He had made an attempt to analyze cost structure, direct expenses and profit, indirect expenses and profit, and how these factors affect the cost structure of textile industry by using various ratios analysis, common size analysis. He made several suggestions for the improvement of profitability of industry to lower the cost used in cost structure.

In the year 1988, one book was published on “Working Capital Structure of Private Enterprises” by J.Panda and A.K. Satapathy. It covers a study of 10 private sectors company engaged in production of cement. The study covers the various aspects of working capital period from 1965 to 1985. He had analyzed working capital position of selected units as a whole and as well as individual analysis. Finally He had made suggestions for the better utilization of various components of working capital.

In the year 1998, a study was made by Dr. S.J. Parmar on “Profitability Analysis of Cement Industry in Gujarat state” for the period from 1998-89 to 1994-95. He had made an attempt to analyze financial strength, liquidity, profitability, cost and sales trend and social welfare trend by using various ratios analysis, common size analysis and value added analysis. He made several suggestions for the improvement of profitability of industry. In his analysis, he indicates various reasons for higher cost, low profitability, and inefficient use of internal resources.

Dr.Pramod Kumar published a book in 1991, “Analysis of Financial Statements of Indian Industries.” The study covered the 17 private, 5 state owned and 1 central public sector companies. He studied analysis of activities, assessment of profitability, return on capital investment, Analysis of financial structure, analysis of fixed assets and
working capital. In this research he revealed various problems of cement industries and suggested remedies for the problems. He also suggested for the improvement of profitability and techniques of cost control.

Dr Sanjay Bhayani published a book in 2003; “Practical Financial Statement Analysis”. The study covered 16 public limited cement companies in private sector. He made study of analysis of profitability, working capital, capital structure and activity of Indian cement industry. In his research he revealed various problems of cement industries and suggested remedies for the problems. He also suggested for the improvement of profitability and techniques of cost control.

Dr. Kumar Bar Das published a comprehensive book in 1987 which covered period from 1970 to 1980. He concluded various aspects like factor productivity, location degree of competition capacity utilization, size efficiency financial performance, distribution pattern and government policies with respect to pricing and distribution. He indicated that all profitability ratios decrease gradually and became negative for 1973-74 and 1974-75 but improved gradually thereafter.

Chakravarty and Reddy made study on ratio analysis as major tool for financial performance by studying 22 ratios of productivity,
Some institutes like DGCI&S, IEEA, and Commerce Research Bureau ELCINA. The Economic Times, CETMA etc have attempted to study the general problem related to industry.

Prof. Amit Mallick and Debasish Sur presented an article on Tea Industry “Working Capital and Profitability - a case study in interrelation which was published in the Management Accountant, November 1998. It explores the correlation between ROI and several ratios to working capital management. They made analysis of the impact of working capital on profitability by using simple correlation between ROI and each of some important ratios of working capital.

The study was made by Kar A.P who had written an article in December 1995 On “Need for Cost and Management Control in Indian Tea Industry” in Management accountant. It gives different cost control techniques to control the cost in tea industry.

Dutts S.K has written an article on “Indian Tea industry - an Appraisal” which was published in Management Accountant in the year of 1992. He analyzed the profitability, liquidity and financial efficiency by using various ratios.
Article expressing a study of Agro-Industry, chemical, Drugs & Pharmaceuticals Industry “Risk and Return Analysis” (Case study of selected industries) was published in” Journal of Accountant & Finance” in April1994. It revealed complete scenario of various aspects of Chemical, Drugs Pharmaceuticals and electronics Industry. It found out different ratios such as return on investment, debt/equity and risk classification that how risk, return related, and how it influences on the selected industry.

Erich A.Helfert explained “The Importance of Performance Policy for Owners/Potential Investors because they can know easily the financial position of the company by return on net worth, return on common equity, earnings per share, cash flow per share, dividend yield, dividend coverage, price earning ratio, market to book value, pay out/retention.

Khan and Jain (2005) expressed uses of the financial statements, profit planning and cost control, corporate decision-making whether they were strategic, analytical or simple routine decision managers.

Kulshreshtha (1972) applied the concept accounting ratio to analysis the statement analysis of Indian Paper Industry.

In their survey among 57 small firms in Canada, 105 largest firms in the US and 39 largest firms in Australia, Khoury et al,(1999) attempted to compare the working capital practice among three nations. The major
aspects of the study were working capital policy, cash and equivalents, account recoverable, inventory, accounts and note payable and managing working capital itself. The study revealed that 7% of the Canadian firms had formal working capital polices and 28.5% had a cautious working capital policy. Further Canadian firms were learning more on the effect on sales whereas the Australian and the US companies were found to focus more on the impact on the firm’s profit while evaluating the credit worthiness of the customers.

While many studies have noted that receivable management was a neglected area, Oppedahl and Richard (1990) examined the causes for such neglect. They found that managements were pre-occupied with capital budgeting projects, which affected the quality of working capital decision. The essay revealed that receivable constituted the most important element of working capital and hence, recommended that the managers need to be very cautious in the management of the same, in order to minimize default risk. It is thus possible to note that management of receivable is found inefficient not only in the Indian context but also in other parts of the world. Considering the fact that the refinery industry is poised for unprecedented growth, it is pertinent to examine the trends in various measures of receivable management in the light of various developments taking place in the place in the economy.
3.3 Title of the Problem:

The title of the problem is “A Study of Productivity and Financial Efficiency of Textile Industry of India”.

Financial Performance of a business organization is largely depending upon the relationship among five major parts’ performance analysis. Those are given as below:

1. Relationship between cost of production and the selling price affect them. In the age of globalization, this is a very vital question to any industry.

2. Profit and profitability are also other considerable things. Due to high degree of competition, the profit margin is decreased.

3. There are certain uncontrollable and controllable factors affecting profits of the companies. It is hypothesized and by controlling the controllable factors, the companies can improve their profit and profitability.

4. There are rapid changes in Liquidity position (working capital) determining factors i.e. manufacturing process and business fluctuation.

5. Ability of the company to perform activity to utilize resources.

6. The companies faced multifarious problems during the study period and still it is facing many problems which are if tackled properly; the performance of the company will improve.
This study is based on the secondary data drawn from published annual reports of textiles companies under study. Various studies have been conducted by the researcher but no significant research work seems to have been undertaken on the interpretation and analysis of productivity and financial efficiency of the industry. Present attempt will be an original contribution in this field as the problem of the study is unique in every aspect.

3.4 OBJECTIVES OF THE STUDY:

The objective of the study is to analyze and interpret the Productivity and Financial Efficiency of Textile Industry of India. “The basic objectives are as under:

1. To examine the position of textiles industry
2. To measure the financial efficiency
3. To assess and comment on determinants of the production, and productivity.
4. To suggest ways and means to improve performance

3.5 Hypothesis:

“A hypothesis is a special proposition, formulated to be tested in a certain given situation as a part of research which states what the researcher is looking for.” In the research study, two hypotheses have been tested, these are as under:
One-way Analysis of Variance Test (ANOVA)

It is useful for inter-unit comparisons.

Null Hypothesis for Financial Efficiency Analysis

1. There is no any significant difference between the gross profit ratios of textiles companies.
2. There is no any significant difference between the operating ratios of textiles companies.
3. There is no any significant difference between net profit ratios of textiles companies.
4. There is no any significant difference between the Return on gross capital employed ratio of textiles companies.
5. There is no any significant difference between the Return on net capital employed ratios of textiles companies.
6. There is no any significant difference between the earning per share ratios of textiles companies.

Hypothesis Based on Chi-square Test:

Chi-square test is useful for inter comparison. For establishing casual relationship regression line of variable “Y” on variable “x” has been calculated and with the help of regression equation of “Y” on “X” calculated value of ‘YC’ has been computed for appropriate variables as per the statement of Null Hypothesis (Ho) “There is no Significant
difference between actual and computed variables on the regression line in selected textiles companies of India.” If the calculated value of Chi-square ($X^2$) is higher than the table value of Chi-square, the arising differences are significant and hence Null Hypothesis is rejected otherwise accepted.

Alternative hypothesis (Ha): The statement of alternative hypothesis describe, as “there is significant difference in actual and computed variables if the null hypothesis is accepted, the alternative hypothesis will be rejected or vice–versa.

**Null Hypothesis (Ho):**

The acceptance of the null hypothesis would suggest that there is no significant difference between the productivity of the selected units, which means that the productivity ratios of the units came from identical populations, in such textiles companies of India as the comparison of the productivity will have little significance. In contrast, the rejection of the null hypothesis will reveal that there is significant difference between the productivity ratios of the units, suggesting the usefulness of comparisons the level of significance used in this case was at 5 percent, while degree of freedom was (total no. of units –1) or (7-1=6) in the present study.

As per empirical study the self-existent assumptions are as under:

1. The data of industry by the postulate. However it is possible to sketch conclusions of the individual company.
2. There are such areas where the performance can be improved by the effective management of resources. These areas include production, productivity, financial efficiency and liquidity position.

3. There are certain controllable and uncontrollable factors which are effective to the profit of the companies. It is hypothesized and by controlling the controllable factors, the company can justify their profit performance.

4. The selected units faced problems during the study period and presently also. If the problems are tackled properly the performance of liquidity, productivity, and financial efficiency stand and will be improved as per determined.

3.6 Scope of the Study:

There are approximately 1200 medium to large scale textile mills in India. Twenty percent of these mills are located in Coimbatore. (Tamilnadu). India has 34 million cotton textile spindles for manufacturing cotton yarn. Cotton yarn account for 70 percent of India’s textile exports (China has 40 million cotton spindles.) Of the Indian textile yarn exports, almost 80 percent come from coarser yarns (counts below 40s). Consequently, there is a need to upgrade the technology. Indian Textile Industry is one of the largest textile industries in the world. Today, Indian economy is largely dependent on textile manufacturing and
exports. India earns around 27% of the foreign exchange from exports of textiles. Further, Indian Textile Industry contributes about 14% of the total industrial production of India. Furthermore, its contribution to the gross domestic product of India is around 3% and the numbers are steadily increasing. Indian Textile Industry involves around 35 million workers directly and it accounts for 21% of the total employment generated in the economy. Researcher has selected 7 (seven) companies as the sample for this study. The sample has been selected considering following factors:-

1. The data which are available for the period of study i.e. from 2002-03 to 2007-08.

2. The companies, which are engaged only in production of textiles products

3. The company should be organized by private sector in India.

4. The company should be listed in Stock Exchanges of India.

The following seven companies have been chosen for the study:

1. Siyaram Silk Mills Ltd.
2. Digjam Ltd.
3. Oswal Spinning & Wvg. Mills Ltd.
4. Shri Dinesh Mills Ltd.
5. Welspun India Ltd.
6. S Kumars Nationwide Ltd.
7. Mafatlal Industries Ltd.

Analysis of productivity and financial efficiency of textile Industry in India of the above companies covered in the present study is fully examined. The conclusion drown and suggestions attempted will provide practical guidance to the management of the companies to promote for improvement of Financial Performance of their companies, as well as Financial manager and workers for talking decision related to their own regards of interest.

3.7 Period of the Study:

The study of Analysis of productivity and financial efficiency of Textiles Industry of India is made for the period of six years from accounting year 2002-03 to 2007-08. Researcher has selected the base year 2002-03. This year is normal for the purpose of analysis and evaluation.

3.8 Data collection and data analysis

“Research is a process of a systematic and in-depth study or search of any particular topic, subject or area of investigation, backed by the collection, compilation, presentation and interpretation of relevant details or data. It is a careful search or inquiry into any subject or subject matter, which is an endeavour to discover or find out valuable facts, which would be useful for further application or utilization”

researchers and
analysis of management problems would result in certain conclusions by means of logical analysis.

For the purpose of study of Productivity and Financial Efficiency of Textiles Industry of India, the secondary data are used. As definition point of view “the term secondary data refers to the statistical material which is not originated by investigator himself but which he obtains from some one’s records” Secondary data, which were not gathered specially to meet the needs of the problem at hand. For the study, data have been collected for the period six years from 2002-03 to 2007-08 from published annual Reports from their registered offices or stock exchanges by visiting personally or by post. Other publications have also been used such as stock exchange official directory, Economics times, Financial Express, R.B.I. Bulletin, Other periodicals Journals.

Personal interviewing of the additional director, Chairmen, Directors, Joint president, Company secretary, chief accountant, General Manager Finance, Executives Joint technical advisory (planning), and assistant Director Technical) have been consulted to collect some keynote information of the Companies of Textiles of Industry.

The figure contained in the annual reports and accounts have been rounded off to crores up to two decimal points. All the collected data have been presented and formulating in the form of condensed balance.
sheet and income statement. All the ratios and mentioned statement have been analyzed and interpreted.

As conclusion point of view interf irm comparision has been made for analysis of performance of selected companies. Various techniques of analysis e.g. Ratio analysis, Trend analysis, Regression, Graphs, Means, Diagrams. Percentage and simple average Methods have been used for the presentation and interpretation of the data and at the end on basis of the conclusion, some suggestions have been made for development of performance.

3.9 (I) Tools for Analysis

For the present study, following tools have been used for analysis of performance of Textiles Industry.

(1) Concept of Variable:

The variable used in the present study is (i) output (ii) input both are as under:

(i) OUTPUT:

It is an important variable. It may be presented in physical units or in monetary values. Generally output is measured with the help of an index of physical production. Under certain circumstances, the use of sales in property weighted physical units in lieu of production is also found. In addition, sometimes, Physical capacity is taken to measure output. According to Prasad N.K. “the output consists; it may be
measured in term of sales values of quantity or both. Monitory sales value is however, not true measure of output because due to the varying profit margins and marketing costs, it fluctuates from period to period and hence is not comparable. Quantitative data volume or number of units are better measures of output but where varieties of products are manufactured and the product mix and types, specifications and qualities of the products are liable to change from time, data are rendered un comparable. The commonly adopted method is to take both sales values and quantity adopted method is to take both sales values and quantity into account for measuring output” in the present study both sales revenue and quantity have been taken in to account for measuring the output and units of outputs.

(ii) Input:

Input comprises of a number of diverse factors. It is not possible to have a common physical unit for measurement of all these factors labour, material, overheads, fuel, and power. These factors constitute the main inputs of an industry.

(2) Ratio Analysis:

Ratio is well known and most widely tool of financial analysis can be defined as “the indicated quotient of two mathematical expression.” as operation definition or ratio is the relationship between one item to another in a simple mathematical form.” a ratio is simply one number
expressed interims of another. It is found by dividing one number the base into the other.\(^4\)

“Generally there are two methods of expressing relationship in ratios.\(^5\) (i) The percentage method like 100 percent etc. “Analysis use ratio to connecting different parts of the financial statements in a to find clues about the status of particular aspects of the business”\(^6\) (ii) The Phrase method such as one and half to one and two for one. Ratio is useful analysis for financial statement. It is conveniently and clearly capsulize the data in a form that is easily understood interpreted as “ratio are simply a means of highlighting in arithmetical terms, the relationship between figures drawn from financial statements”\(^7\) The technique of ratio analysis is the process of determining and interpreting numerical relationship based on the financial statements

According to Batty “accounting ratio describe the significant relationship which exist between figures shown in a Balance sheet, in a profit and loss account, in a budgetary control system or another part of accounting organization.”\(^8\)

It concludes whether the financial condition of a business enterprise is good or bad it is universally used for appraising the performance of a business firm.
(3) TREND ANALYSIS:

The ratio analysis gives a reasonable good picture but it is incomplete in one important respect- it ignores the time dimension. The radios are snapshots of the picture at one point in time but there may be trends in motion that are in the process of rapidly eroding a relatively good present position. Trend analysis is tool of analysis the financial statement in more simplified form over a period of years, “Trend analysis is horizontal analysis of financial statements often called as ‘pyramid method’ of ratio analysis-a guide to yearly changes.”

In the wards “one of the most useful forms of horizontal analysis is trend analysis. It is especially helpful in revealing proportionate change over time in selected financial data.” Trend analysis makes it easy to understand the changes in an item over a period of time and to draw conclusions regarding the changes in data. For analyzing the trend of data depicted in the financial statements it is necessary to have statements for a number of years. This method involves the interpretation of the percentage relationship that each statement item, bears to the same item in the ‘base year.’

(II) Statistical Tools

Statistical tools are utilized for data analysis and interpretation of the firm. A brief outline of the various statistical techniques being used for present study:
(1) CHI-SQUARE TEST:

The Chi-square test ($x^2$) is one of the widely used non-parametric tests among the several tests of significant developed by statisticians. Chi-square pronounced as Ki-Square. According to Ullman Neil R”Chi-square as a non parametric test it can be used to determine if categorical data shows dependency or the two classifications is independent. It can be also be used to make comparisons between theoretical populations and actual data when categories are used” the formula used for calculation of chi-square is as following

$$\text{CHI-SQUARE (X}^2\text{)} = \sum \frac{(O-E)^2}{E}$$

Where ‘O’ denotes the observed values and ‘E’ refers to the expected values. The expected value will be calculated with the help of Regression analysis and time series analysis. Chi-square distribution and critical values of Chi-square are obtained from the tables of Chi-Square distribution. The expected values will be determined with the help of assumption where the data come from the hypothesized distribution. The Chi-Square distribution is a continuous probably distribution which has the value zero at its lower limit and extraction.

(3) INDEX NUMBERS

“Index number as a number which is used to measure the level of a given phenomenon as compared to the level of the same phenomenon at
Index numbers nothing more than a relative number, or a relative which expresses the relationship between two figures, where one of the figures is used as a base present study indices of sales, production and capacity utilization of selected Textiles of companies have been found out by taking 1997-98 as the base year and indices of the rest years have been calculated.

(4) ARITHMETIC MEAN

It is called as the average of difference of the values of items from some average of the series. According to Gulerian “the most commonly used average is the arithmetic mean, briefly referred to as the mean” the mean has been found by adding all the variables and dividing it by the total number of years taken.

(5) STANDARD DEVIATION

Standard deviation may be defined as positive square root of the variance. While the variance of a sample is the average square deviation of values from the mean

(6) CO-EFFICIENT OF VARIATION:

Co-efficient of variation has been defined as the percentage of the standard deviation to the mean. It should be noted that higher the variability the greater would be the co-efficient of variation. Therefore, it may be pointed out that for the stability of results, Co-efficient of
variation must be low. Co-efficient of variation (C.V.) may be calculated with the help of standard deviation and mean $^{20}$

\[
\text{Co-efficient of variation} = \frac{\text{Standard Deviation}}{\text{Arithmetic Mean}} \times 100
\]

3.10 CHAPTER PLAN

The present study is divided into nine chapters, which are as under:

CHAPTER–1

PROFILE OF TEXTILE INDUSTRY IN INDIA

This chapter deals with the historical background –Colonization – An end of the Indian textile legacy-MFA Quota Removal and Indian textile exports-Overview of the global textile market-Share in world trade by region-Indian textile Indian present scenario-Process of globalization-Re-emergence of the India Textile Industry-Current undercurrent in Indian textile industry -Vision for future- Conclusion- introduction of selected companies.

CHAPTER–2

CONCEPTUAL FRAMEWORK OF FINANCIAL EFFICIENCY AND PRODUCTIVITY MANAGEMENT

This chapter deals with introduction and concept of financial performance and financial analysis – Legal provisions of financial
statements – Types of financial statements – Importance and Usefulness of financial statements – Need and Aims of financial performance

CHAPTER 3
RESEARCH DESIGN

Details of this chapter is - Problem Identification – Survey of Existing Literature- Statement of Problem – Objectives of the study- Hypothesis – scope of Study – Sampling Design – Period of Study- Data collection and data analysis - Tools and techniques for analysis of productivity and financial efficiency of textile industry– chapter plan and Limitations of the study.

CHAPTER 4
ANALYSIS OF FINANCIAL EFFICIENCY

This chapter describes the concept of financial efficiency, profitability, difference between profit and profitability, measurement tools such as gross profit ratio, operating profit ratio, net profit ratio, return on gross capital employed, Return on net capital employed, Return on net worth and earning per share. ANOVA test has been used with conclusion of the chapter.
CHAPTER – 5

ANALYSIS OF MATERIAL PRODUCTIVITY

This chapter covers concept of Material productivity – Significance of Material productivity – Calculation of material productivity-Index and Trend analysis –Chi-square test – Co-variance and co-efficiency of Index.

CHAPTER – 6

ANALYSIS OF LABOUR PRODUCTIVITY

This chapter deals with concept of labour productivity-Methods and measurement of labour productivity-factor affecting the productivity-Significance and limitation of labour productivity -unit wise calculation and interpretation and combative analysis. Index and trend analysis – Chi-square test – Co-variance and co-efficiency of Index.

CHAPTER – 7

ANALYSIS OF OVERHEADS PRODUCTIVITY

This chapter deals with concept of overheads productivity-Methods and measurement of overheads productivity-Overheads productivity ratio-Indices-Co-efficiencies, co relationship-input output ratio as well as chi-square test.
CHAPTER – 8
ANALYSIS OF OVERALL PRODUCTIVITY

This chapter deals with concept of overall productivity-Methods and measurement of overall productivity-overall productivity ratio-Indices-Co-efficiencies co relationship-input output ratio as well as chi-square test.

CHAPTER – 9
SUMMARY, FINDINGS AND SUGGESTIONS

This chapter gives its emerging conclusion based on the analysis carried out and points out the variations if any from the literature. Besides, it also gives concrete suggestions for enhancing profitability, for financial soundness, for cost reduction and control and liquidity position.

3.10 Limitations of Study

This study is based on secondary data taken from published annual reports of selected textile companies.

1. There are different approaches to measure the profitability, financial efficiency and operational efficiency with regard to productivity in this regard expert views differ from one another.

2. The different views have been applied in the calculation of different ratios.
3. The present study is largely based on ratio analysis. It has its own limitations.

References:


3. Ibidem, P.No. 2

4. ANTHONY ROBERT R. “Management accounting-Tex and cases” Richrd D.Irwin inc.illinois, 1964, p.297

5. SHARMA R.P. “Corporate financial structure” printwell publishers, Jaipur-302004, p.6


17. KOTHARI C.R. “Research Methodology –“Methods and techniques” Wishwa Prakashan, New Delhi, 1997, p.18