CHAPTER – 1

THE RESEARCH METHODOLOGY

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CHAPTER – 1
THE RESEARCH METHODOLOGY

1. INTRODUCTION :-

Corporate restructuring has become a major component in the financial and economic environment all over the world. Industrial restructurings have raised important issues for business decisions as well as for public formulation policy. Since 1991, Indian industries have been increasingly exposed to both domestic and international competition and competitiveness. Hence, in recent times companies have started restructuring their operations around their core business activities through mergers and acquisitions.

2. TITLE OF THE PROBLEM :-

It is true that dramatic events like mergers, acquisitions, takeovers, restructuring and corporate controls occupy the Indian business news papers almost daily. Further they have become central focus of public and corporate policy issues. Some assert that the activities of mergers and acquisitions represent a new force in creativity and productivity. Some other view it is blight in our economy. Regardless of these views, they do represent a major trend in the economical environment. This is an area of potential good as well as potential harm in corporate strategy including manufacturing industry. Mergers take place due to various motives. There for an analysis has to be made to compare the financial performance of pre and post merger of the firms. The title of the problem is as under:

“Financial Growth Indicator of Merger and Acquisition in Indian Corporate Sector”
3. REVIEW OF LITERATURE:

In this study an attempt has been made to briefly review the work already undertaken and methodology employed. A brief review of selected studies has been presented as below:

(1) David C. Cheng (1989), in their paper ‘Financial determinants of Bank Takeovers’ found that several studies have examined the determinants of bank merger pricing. Those studies focus on the characteristics of the target and downplay the characteristics of acquirer. Their study found that the purchase price is a negative function of the target’s capital to asset ratio. The only variable used in their model is the ratio of acquirer to target assets.

(2) An empirical study entitled ‘Takeovers as a strategy of turnaround’ by Ravi Sanker and Rao K.V. (1998) analysis the implications of takeovers from the financial point of view with the help of certain parameters like liquidity, leverage, profitability etc. They observed that a sick company is takeover by a good management and makes serious attempts; it is possible to turnaround successfully.

(3) Ruhani Ali and Gupta G S (1999) in their paper entitled ‘Motivation and Outcomes of Malaysian takeovers: An international perspective’ examine the potential motives and effects of corporate takeovers in Malaysia. The Mullar’s methodology, which involves the use accounting measures like size, growth, profitability, risk and leverage is employed for the study to analyze the performance characteristics of takeover firms in the pre and post takeovers periods.

(4) Jay Kumar S. (1999) in his dissertation entitled, ‘Mergers and Acquisitions: An Evaluation Study’ examines the relative benefits expected by a corporate enterprise when they adopts mergers and
acquisitions as a strategy. The author studies the extent to which the security prices reacted to the announcement of merger.

(5) The working paper entitled, ‘An analysis of merger in the private corporate sector in India’ by Beena P. L. (2000) attempts to analyze the significance of merger and their characteristics. The paper establishes that acceleration of the merger movement in the early 1990s was accompanied by the dominance of merger between firms belonging to the same business group of houses with similar product line.

(6) The dissertation entitled, ‘An Analysis of Mergers and Acquisitions’ by Canagavally R. (2000), measures the performance in terms of size, growth, profitability and risk of the companies before and after merger. The dissertation also investigates the share prices of sample companies in response to the announcement of merger.

(7) The paper entitled ‘Merger and Acquisition unlocking value’ by Huzifa Husain (2000), explains that takeovers (hostile or non-hostile) may be beneficial to the shareholders if they unlock the hidden value of a company. They also help the existing management to be more receptive to shareholders. Economically, takeovers make sense if the ‘private market value’ of a company is higher than the market capitalization of the company. Further if takeovers are used as a ploy to prevent competition, it becomes harmful to the economy. Therefore, proper checks and balances have to be put in place to ensure that takeover facilitation improves overall efficiency of the economy.

(8) The study entitled, Trumps for M & A – Information Technology Management in a merger and acquisition strategy (2001), found that success of merger and acquisitions depends on proper integration of employees, organization culture, IT, products, operations and service of
both the companies. Proper IT integration in merger plays a critical role in determining how effectively merged organizations are able to integrate business processes and people, and deliver products and services to both internal and external customers of the organization. The study suggests that to address the challenges, Chief Information Officers should be involved from the earliest phase.

(9) Mr. Surjit Kaur (2002) in her dissertation entitled, A study of corporate takeovers in India, examines the M & A activity in India during the post liberalization period. The study tested the usefulness of select financial ratios to predict corporate takeovers in India.

(10) The study entitled ‘Mergers and Operating Performance : Indian Experience’ (2007) by Pramod Mantravadi and A. Vidyadhar Reddy, explains that This research study aims to study the impact of M & A on the operating performance of acquiring corporate in different periods in India, by examining some pre and post merger financial ratios with chosen sample firms and mergers between 1991-2003. The result suggests that there are minor variations in terms of impact on operating performance following merger in different intervals of time in India.

(11) The paper entitled ‘M & A and Corporate Performance in Japan' By – Ryo Kawahara & Fumiko Takeda ICFAI journal of M & A, Sept, 2007, This paper investigates how M & A affect corporate performance for three years after their implementation. The corporate performance of 162 M & A that took place in Japan from 2001-03 is analyzed by using Wilcoxon signed rank test. They find that overall effects of M & A on corporate performance are statistically insignificant, compared to the corporate performance of other companies within the same industry with similar pre-acquisition performance.
Ruhani Ali and Gupta G S (1999) in their paper entitled, 'Motivation and Outcome of Malaysian Takeovers: An International Perspective' examine the potential motives and effects of corporate takeovers in Malaysia. The Muller's methodology, which involves the use of accounting measures like size, growth, profitability, risk and leverage, is employed for the study to analyze the performance characteristics of takeover firms in the pre- and post-takeover periods.

The study entitled, "LBOs, Corporate Restructuring and The Incentive-Intensity Hypothesis" investigated the argument that corporate restructuring is an intended outcome of LBO transactions directly. Using a detailed database on corporate operations, the study investigated four aspects of corporate restructuring, namely, corporate downsizing, corporate refocusing, portfolio reorganization and changes in the industry characteristics of portfolio business. The results of this study strongly suggest that the governance structure of LBO firms enables the managers to forge growth more effectively than the governance structure of public firms. This study analyzed the effects of LBOs on corporate restructuring activity by analyzing differences in restructuring activity between 33 large LBO firms and 33 closely matched public corporations. The evidences presented in the study show that certain types of corporate restructuring are more prevalent and extensive in LBO firms than similar ones in public firms.

The study, conducted by Ajay Pandey (2001) in the context of developed countries, points out the substantial valuation gains for target firms, particularly in the case of successful takeovers. The primary motivation for the study was to test whether takeovers are seen by capital market as creating value to the firm by improving performance following change in management or as mere replacement
of existing management without any expectation of concomitant improved managerial and firm performance.

(15) Healy, Palepu, Ruback examined the performance of 50 US mergers post acquisition using the criteria of cash flow performance and found that the operating performance of these companies were distinctly better following acquisitions. But the other claim that the operating cash flow performance did not improved

4. OBJECTIVES OF THE STUDY:-

The broad objective of this study is to measure the impact of mergers and acquisitions on financial growth indicators in Indian Corporate Sectors. Other objectives of the study are mentioned as under.

1) To examine and evaluate the impact of mergers and acquisitions on the liquidity and leverage position of the selected units by some important parameters of liquidity and leverage management such as:-
   - Current Ratio
   - Current Ratio (Including short-term loan)
   - Quick Ratio
   - Inventory Turnover Ratio
   - Debtors Ratio
   - Long Term Debt to Equity Ratio
   - Total Debt to Equity Ratio
   - Fixed Assets Turnover Ratio etc.

2) To examine and evaluate the impact of mergers and acquisitions on the profitability position of the selected companies by some important parameters of profitability management such as:-
   - Gross Capital Employed Ratio
   - Net Capital Employed Ratio
- Return on Owner’s Fund Ratio
- Gross Profit Ratio
- Net Profit Ratio
- Operating Profit Ratio
- Earning Per Share Ratio etc.

5. DATA COLLECTION: -

The study is based on the secondary data taken from the annual reports of selected units and EMIS data base website. And all the data relating to history, growth and development of Industries have been collected mainly from the books and magazine relating to the industry and published paper, report, article and from the various news papers, bulletins and other various research reports published by industry and research organization, various web sites like www. sebi. gov. in, www. indiainfoline.com, www. rbi. Org. in.

The data relating to the selected units under study have been obtained from prospectus, pamphlets and annual reports of the selected units.

6. SELECTION OF SAMPLES: -

The study has been carried out on the micro-level, as it is not possible for the researcher to conduct it on the macro-level. The population of the study consists of all types of the companies having different operations of business and totally different nature of industries. As the study is to be carried out by the individual researcher it is not easy to select all the companies as the samples for the study. So, the convenient random sampling has been done. As such the universe of the study is Indian Industries; the researcher has selected 10 companies (Which are top ten mergers and acquisitions during the year 1996 to 2002) as mentioned below:
7. PERIOD OF THE STUDY:-

The present study is mainly intended to examine the financial performance of merged companies five years before merger and five years after merger.

8. HYPOTHESIS OF THE STUDY: -

On the basis of data collection, the researcher has identified the following broader hypothesis for the study:

- **NULL HYPOTHESIS: -**

1) There would be no significant difference in means score of profitability indicators in selected units, before and after merger and acquisition.

2) There would be no significant difference in means score of liquidity indicators in selected units, before and after merger and acquisition.

3) There would be no significant difference in means score of leverage indicators in selected units, before and after merger and acquisition.
• ALTERNATE HYPOTHESIS: -

1) There would be significant difference in means score of profitability indicators in selected units, before and after merger and acquisition.

2) There would be significant difference in means score of liquidity indicators in selected units, before and after merger and acquisition.

3) There would be significant difference in means score of leverage indicators in selected units, before and after merger and acquisition.

9. TOOLS OF ANALYSIS:-

(A) Ratio Analysis:

Ratios are among the well known and most widely used tools of financial analysis. Ratio can be defined as “The indicated quotient of two mathematical expression”. An operational definition of ratio is the relationship between one item to another expressed in simple mathematical form.

(B) Statistical Techniques :-

(i) Average:-

The most commonly used average is the arithmetic mean, briefly referred to as the mean. The mean can be found by adding all the variables and dividing it by total number of years taken. It gives a brief picture of a large group, which it represents and gives a basic of comparison with other groups.

(ii) Index Number :-

According to Croxton and Crowden “Index numbers are devices for measuring difference in the magnitude of a group of related variables”
While as per Morris Hamburg “In its simplest form an index number is 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.”

(iii) The Standard Deviation :-

The standard deviation concept was introduced by Karl Pearson in 1823. It is by far the most important and widely used measure of studying Dispersion. Standard Deviation is also known as root mean square deviation for the reason that it is the square root of the mean of the squared deviation from arithmetic mean. Standard deviation is denoted by small Greek letter “σ”.

(iv) Student t-test:-

T – test is based on T – Distribution and is considering an appropriate test for judging the significance of a sample mean. It can also be used for judging, the significance of the coefficients of simple and partial correlations.

The relevant test statistic, is calculated from the sample data and then compared with its problem value based on T – distribution at a specified level of significance for concerning degrees of freedom for accepting or rejecting the Null Hypothesis.

10. SIGNIFICANCE OF THE STUDY: -

A) Contribution to the knowledge: -

- Through this study my knowledge particularly regarding various ratios will be improved.
- Through this study my knowledge particularly regarding various statistical tools and techniques and statistical tests is improved.
- My analytical power will be improved.
B) Contribution to the society: -
- Through this research society will be able to know the real situation of the liquidity and profitability position, of selected units, before and after merger and acquisition.
- Through this study creditors and other parties can take proper decision.
- Employees will be able to take proper decision regarding job (work).

C) Contribution to the Industry: -
- Industry may be able to maintain their Liquidity and Profitability position during post merger and acquisition.
- Industry may be able to know the impact of mergers and acquisitions on their financial performance.

11. OUTLINE OF CHAPTER PLAN:-

Chapter – 1
Research Methodology:-

It covers the following aspects:

Introduction, title of the problem, Data collection, Sample selection, Period of the study, Review of literature, Objective of the study, Significance of the study, Hypothesis, Tools of analysis and Limitations of the study.

Chapter – 2
Conceptual Framework of Merger and Acquisition:

In this chapter Introduction, Definition of merger and acquisition, history of merger and acquisition, Types of merger, difference between merger and acquisition, difference between acquisition and takeover, Merger and Acquisition Process, Significance of merger and acquisition,
Requirement of merger and acquisition, Motives behind merger and acquisition, Benefits of merger and acquisition, Limitations of merger, Impact of merger and acquisition, Financial accounting for merger and acquisition, Merger and acquisition strategies, Merger and acquisition laws, Merger and acquisition in India, Merger and acquisition in world have been included.

**Chapter – 3**

**Brief profile of the Selected Industries**

In this chapter the brief history of the selected 10 units, list of board of directors, products and manufacturing process, organization structure of the selected units, plants and its operations, production capacity of each unit, list of associates and subsidiary companies, major achievements of the selected units, corporate governance report and social responsibility, strength and weaknesses and future plans of the selected units have been discussed.

**Chapter – 4**

**Analysis and Interpretation of Data**

In this chapter analysis of profitability, liquidity and leverage position of selected units under study have been explained. Here meaning of profitability, liquidity and leverage, various measurement of profitability, liquidity and leverage and framework of analysis of profitability has been discussed. For analysis and interpretation of data the return on gross capital employed ratio, return on net capital employed ratio, return on share holders’ funds ratio, return on long-term funds ratio, Earning per share ratio, gross profit ratio, net profit ratio and operating profit ratio for the profitability analysis and current ratio, quick ratio, inventory turnover ratio, debtors ratio, long-term debt to equity ratio, total debt to equity ratio, fixed assets turnover ratio and working capital turnover ratio for the liquidity and leverage analysis
have been calculated by the researcher. Here various ratios of profitability, liquidity and leverage have been tested with the help of student paired ‘t’ test.

Chapter – 5
Summary, Finding and Suggestions

In this chapter summery of first five chapters, major findings and suggestions of the present study have been shown.

12. LIMITATION OF THE STUDY:-

    Every live and non live factor has its own limitations which restrict the usability of that factor. The same rule applies to this research work. The major limitations of this study are as under:

1. This study is mainly based on secondary data derived from the annual reports of industry. The reliability and the finding are contingent upon the data published in annual report.

2. There are many approaches for evaluation of Profitability and Liquidity. There are no common views among experts.

3. The study is limited to five years before merger and five years after merger only.

4. Accounting ratios have its own limitation, which also applied to the study.

5. Inflation plays vital role in Indian Economy. If we do not considered inflation when analysis of financial condition, is studied, evaluation may be not truly representative. In this study the effect of inflation is not considered which becomes its limitation.
6. This study is related with ten units. Any generalization for universal application cannot be applied here.

7. Financial analysis do not repict those facts which cannot be expressed in terms of money, for example – efficiency of workers, reputation and prestige of the management
REFERENCES

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5. C. R. Kothari by Research methodology