CHAPTER-I  
FRAMEWORK OF THE STUDY

In this chapter, the overall scheme of the study is explained. The introduction of the topic, purpose of the study, objectives, hypotheses, scope and methodology of the study have been duly described in ongoing chapter.

1-1) INTRODUCTION

When you read any book on financial management, the first chapter will introduce you to the fact that the goal of financial decisions is to create highest capital employees (owners & lenders) wealth and consequently enhancing the value of the firm. This goal can be achieved by planning, decision making and controlling over the capital which is employed.

Financing decisions are responsible for executing mentioned activities and relate to the financing pattern of the firm. It involves in deciding as to when, where and how to acquire the funds to meet the firm’s investment needs. Different sources of finance have different advantages with different degree of risk. Hence it becomes imperative to decide as to how much finance is to be raised and from which sources.

Primarily, there are two main sources of finance; one is the owned funds (equity) and second is the borrowed funds (debt). Owned funds are the shareholders’ monies on which dividend are paid. Dividend payment depends upon the profitability of the company and is not binding. There is no commitment involved in the shareholders funds. On the other hand, borrowed funds involve fixed commitments; their repayments are secured by a charge created on the assets and interest payments are obligatory irrespective of the profits or losses of the company. Hence, it increases the financial risk of the company. So the corporate
manager should try to maintain the mix of debt and equity at a level, which would result in maximum return with manageable risk. Such a mix of capital structure is known as “optimal capital structure”.

An optimal capital structure can be considered as that particular combination of debt, preference and equity capitals at which the company’s cost of capital is at its minimum or alternatively, the value and wealth of the company is at its maximum. Hence the objective is to determine a debt-equity mix, which would lead to maximum market price of equity share. This would mean minimization of the cost of capital. In the other word, the prime objective is to keep the cost of finance at the minimum with maximum utilization of funds, in order to maximize the profits.

Various measures like Earning Per Share (EPS), Return on Assets (ROA), Return on Capital Employed (ROCE) and etc. have been used to evaluate the performance of the business in utilization of the funds. The problem with these performance measures is that they lack a proper benchmark for comparison. The shareholders require at least a minimum rate of return that the above mentioned performance measures ignore.

Over the past several years, an alternative performance measure called Economic Value Added (EVA) has been gaining acceptance in United States. EVA is defined as the excess of a company’s after tax net operating profit over the required minimum rate of return which investors could get by investing in other securities of comparable risk. It is the financial performance measure that captures the true economic profit of a company. As it is observed the capital structure is one of the important factors that should be taken into account in order to achieve highest capital employee’s wealth and Economic Value Added is a tool for identifying whether
the management of the company has created such wealth or has destroyed it.

1-2) PURPOSE OF THE STUDY

The basic theme of the study is woven around the capital structure and financial decisions made by an organization and its impact on the company’s wealth in the form of EVA. The reasons for undertaking this study are given below:

➢ **Relationship between Economic Value Added and Capital Structure:**

The researcher believes that capital structure affects the Economic Value Added and thereby shareholder’s wealth. The change in the capital structure causes increase or decrease in cost of capital and so on the Economic Value Added of the firm. Therefore, finding out the correlation between these factors backed by facts and observations would benefit for decision making process.

➢ **Long-term and Strategic business policies and decisions:**

The important goal and objective of management of any company is to create highest capital employees (owners & lenders) wealth and consequently enhancing the value of the firm. These goals can be achieved by planning, decision making and controlling which are depended on the capital structure and Capital charges. Thus the success or failure of company largely depends on the prudence of these decisions. So this study would help to find out the sensitivity of EVA to capital structure and finding out the reasons of the companies which have succeeded and reasons of the companies which have failed. These results may lead to certain sound principles of strategic business policies.
To introduce EVA as a performance measure which has highest correlation with Market Value Added:

Because investors are interested to identify the situation of invested company, so they are looking for proper performance measure for this purpose. Here the researcher evaluates the ability of EVA in comparison with other traditional measures as indicators to present the real company’s wealth. He is going to introduce EVA to the managers and investors as performance measure which has higher degree of clearance and transparency to show the company position in creating wealth or destroying it.

1-3) OBJECTIVES OF THE STUDY

The specific objectives of the study are as follows:

a) To find out capital structure of Automobile Industry for the period under study.

b) To compute and analyze Economic Value Added of the Automobile Industry Firms.

c) To study the impact of capital structure on Economic Value Added.

d) To study the relationship between shareholder’s wealth and financial measures (EVA, EPS, NOPAT, ROA and ROCE) and to come across the simple most significant explanatory measure.

e) To make suggestions & recommendations for the use of EVA as a measure of financial performance to Indian corporate managers.

1-4) HYPOTHESES

Keeping in view the results of the various related research studies on EVA and corresponding to the objectives of the present study, the following hypotheses have been formulated and tested:
1. There is a trend for automobile companies to go in for debt capital during the years 2001 to 2005.

2. There is an increasing trend for EVA of automobile companies during the period of the study.

3. There is a meaningful relationship between capital structure and Economic Value Added (EVA).

4. EVA is the most explanatory measure and more closely associated with Market Value Added than other performance measures such as EPS, NOPAT, ROA and ROCE.

1-5) SCOPE OF THE STUDY

- **Data for study:** The study would be based on the published financial reports of the companies and all the information published in financial reports would be taken in consideration while doing the research.

- **Period for study:** The financial decisions are long-term decisions. They reflect the long-term strategies of the companies. Therefore the financial statement of at least 5 years would be taken into consideration for studying the capital structure and economic value added.

In this part population and period under study are explained.

1-5-1) **Population:**

The study covers Indian Automobile Industry Firms which are listed in Bombay Stock Exchange.

As per the statistical reports of Centre for Monitoring Indian Economy (CMIE), Automobile Industry has the highest growth rate of Capital Employed, Net Worth, and Gross Fixed Assets among manufacturing industries in India for the period of 1996-2004. This is the rational reason to select Automobile Industry in order to examine implications of EVA in Indian Industries.
1-5-2) Period of the Study:

The financial years, 2001 to 2005, have been taken for the purpose of the study. So the financial data for at least 5 years has been taken into consideration for studying the relation between capital structure and economic value added and testing the other hypotheses.

1-6) METHODOLOGY OF THE STUDY

This section explains the methodology adopted for the purpose of the study. The size of population, methods used for collection of data, and statistical methods used for testing of hypotheses are discussed.

1-6-1) Sample of the Study:

The firms in the population were selected, based on the following criteria:

1) Automobile Industry Firms which have been listed on Bombay Stock Exchange (BSE) in or before 2001;

2) They must be existing in BSE till the financial year 2005;

3) They should not have negative values for average operating income during the period of the study.

Consequently, the above population that consists of 17 companies in Automobile Industry has been used for the study.

1-6-2) Collection of Data:

Three kinds of data and information have been collected which are as follows:

I) Historical Information of Automobile Industry

II) Financial Reports of the Automobile Firms

III) Necessary economic data for the calculation of EVA and MVA.
Some historical data for Automobile Industry and selected companies have been collected from “Research, Statistics & Publication Department” and also “Library” of Bombay Stock Exchange (BSE).

The required financial data of the firms, for the purpose of the study has been obtained from Bombay Stock Exchange Official Directory, Bombay Stock Exchange Corporate Compendium, Center for Monitoring Indian Economy products (particularly Prowess database), companies’ websites and the other Internet websites. In addition the various Annual Reports of the Companies were duly referred to, in order to accumulate the missing data from the above mentioned sources. For last part of data collection several libraries of different Institutes and Colleges have been visited which are mentioned in Chapter (V) in details.

1-6-3) Analysis of Data:

In order to meet the objectives of the study, the analysis has divided in three parts: (1) Trend analysis of capital structure and Economic Value Added, (2) Analysis of the effect of capital structure on EVA; and (3) Analysis of whether EVA is the best performance measure to present firm value and is more relative to MVA in comparison with the other traditional measures.

First section reviews the trend of capital structure pattern followed by Indian Automobile Industry and also identifies the created amount of economic value added by the industry for the period of 2001 to 2005.

In second part, the researcher tries to find out whether any relationship exists between the capital structure - as a sources of firm finance- and economic value added -as a tool to recognize how those sources has been utilized in the company- on the other hand.
Third part evaluates whether EVA has more correlation with MVA than other performance measures such as EPS, NOPAT, ROA and ROCE. It means that the researcher tries to find out any significant relationship between EVA and stock returns.

The analyses have been done by using Panel Data analysis methods. It represents a marriage of regression and time-series analysis. As with many regression data sets, panel data are composed of a cross section of subjects. Unlike regression data, with panel data we observe subject over time. Unlike time-series data, with panel data we observe many subjects. Observing a broad cross section of subjects over time allows us to study dynamic, as well as cross-sectional, aspects of a problem.

In this research two methods of estimation have been used for panel data analysis; (1) Generalized Estimating Equations (GEE) and (2) Feasible Generalized Least Squares (FGLS).

1-7) LIMITATIONS OF THE STUDY

1) Whole study would be undertaken only on the basis of published financial reports, published articles related to the topics, information available on CMIE products, Internet etc. No survey would be undertaken and no primary data would be collected for the research.

2) The present study is based on the data collected from automobile industry, so its result may not be applicable to other Indian industries.

1-8) CHAPTER SCHEME

CHAPTER-I: FRAMEWORK OF THE STUDY

In this chapter, the overall scheme of the study has been presented. The introduction of the topic, purpose, objectives,
hypotheses, scope and methodology of the study have been explained in brief.

CHAPTER–II: EVA–AN APPROPRIATE PERFORMANCE MEASURE

This chapter is conceptual in nature and has been divided into seven sub-parts, which includes introduction, EVA: evolution and growth, EVA as a tool of financial management measurement, EVA definition and the method of its calculation, the benefits and limitations of EVA, the common mistakes in implementing/using EVA and finally EVA in Indian Corporates.

CHAPTER–III: STUDY OF PREVIOUS LITERATURE

This chapter highlights the review of earlier literature regarding Economic Value Added. The relevant literature has been studied from various articles published in numerous journals and in specific books on the subject.

CHAPTER–IV: HISTORY OF AUTOMOBILE INDUSTRY

History of the Automobile Industry of the world and in India has been highlighted in this chapter. The present position of this Industry in the world and in India has been studied. The scope of the Automobile Industry in the near future has also been explained.

CHAPTER–V: METHODOLOGY

This chapter explains the methodology adopted for the purpose of the study. The size of population, methods used for collection of data, statistical methods used for finding the correlations and finally testing of hypotheses has been discussed exhaustively.
CHAPTER–VI: RESULTS OF THE STUDY /OBSERVATIONS, DISCUSSIONS AND CONCLUSIONS:

Various Tables and Charts have been prepared on the basis of the numerous data gathered. Findings of the various Statistical Tests have presented in this chapter. After interpretations of the findings, major conclusions have been made in this chapter.

CHAPTER–VII: SUMMARY AND RECOMMENDATIONS

This chapter deals with the summary of the Thesis, suggestions and areas open for further research. Based on the analysis, some important recommendations have been made which if noted could be useful.