CHAPTER – I

INTRODUCTION AND DESIGN OF THE STUDY
1.1 INTRODUCTION

Corporate firms are legal entities that can have multiple owners and separate management. The ability to attract multiple investors through the sale of shares or bonds gives corporate firms broad access to capital and greater potential for growth. The shares of corporate firms can be easily transferred to other investors without disrupting their operations. The owners of corporate firms also enjoy limited liability since their liability is limited to the amount they have invested.

A corporate firm can finance its investments using equity or debt. Equity is either cash available to the firm or funds raised by issuing stock, primarily equity shares. Dividends paid to shareholders are not tax-deductible; thus, dividends are paid from profits after tax. Interest paid by a corporation to its lenders is tax-deductible, thus generating a tax shield.

Corporations have no physical reality; they are entirely the product of legal and accounting rules. But because of the importance of corporate activity in modern economies, scholars in economics and finance have an interest in analyzing the effect of corporate taxes on corporate performance and growth.

Taxation of corporate profits has been one of the most widely discussed issues in the area of public finance. Corporate revenues are currently subject to double taxation. Profits are taxed first at the corporate level and then, when distributed as dividends (currently exempted) or when capital gains are realized, taxed a second time at the individual level. In understanding why corporate
taxation is such a highly contested issue, some critics argue that the current tax system discourages business entities from organizing as taxable corporations and encourage corporations to veer from socially efficient decisions. These critics believe that the losses to the economy of a country caused by the current corporate tax system far exceed the revenues raised. Supporters of corporate taxation reply to those allegations by saying that corporations are distinct entities and should be taxed separately from their shareholders. They further say that corporations should pay a fee, tax, for the special privileges they enjoy.

1.2 CORPORATE INCOME TAX

The principal direct taxes include personal income tax (PIT) and corporate income tax (CIT), wealth tax, State taxes on agricultural income and various withholding taxes. The personal income tax including surcharge is levied on non-agricultural income at rates varying from 10 percent to 31.5 percent Corporate income tax is the income tax levied on corporate total income. A corporation's taxable income is its total income computed as under the Income-tax Act. The corporate income tax is levied at a rate of 33.66 percent for domestic companies (including surcharge). Other corporate taxes include a 12.75 percent tax (including surcharge) on dividend distribution, a minimum alternative tax on profits, a tax on fringe benefits, and various withholding taxes on interest, royalties, etc.

The main indirect taxes are central customs and excise duties, central service tax, central sales tax, the state value added tax and sales taxes. The value added tax and sales taxes are levied on intrastate trade and the central sales tax on interstate trade, at a rate that varies depending on the type of transaction and goods. The value added tax rates are one percent, four percent, and 12.5 percent.
Sales taxes are also levied on specific items (e.g., petroleum products). The five States that have not implemented value added tax continue to levy sales tax. The center levies customs duties and a basic excise duty on goods manufactured or produced in India. The CENVAT base is truncated to manufacturing and eroded by a complex and extensive system of exemptions, including for small-scale industries and Special Economic Zones. Special central excise duties are levied on specific items. Service tax is levied by the central Government on some services. Other minor taxes and duties imposed by both central and state Governments include stamp duty, taxes on land and buildings, and taxes on motor vehicles.

The corporate tax system in India underwent a major change during 1959-60, when the partial imputation system was replaced by the classical system of taxing corporate income. Unlike the present classical system, the partial imputation system provided credit to the shareholder for the corporate tax paid on the company's distributed corporate profits. The current system treats the company as a separate legal entity and there is no allowance or credit given to the shareholders for any part of the tax paid by the company on the distributed components of profits. The Chelliah Committee reiterated the merits of continuing the classical system of providing no relief in respect of dividends on which the taxpayer has already paid tax to be retained in the short run.

Tax reform is universal and the reforms in India have been largely in response to the massive reforms enacted in the United Kingdom and the United States in the 1980s. Tax reforms, such as the reduction in personal and corporate income tax rates, and the determination of a minimum exemption limit (tax threshold), are generally applicable to both developed and developing economies.
The tax policies of the 1990s represent a total departure from the multiple tax brackets and high rates of the 1970s and 1980s in India. Simplification and rationalization have been emphasized with the ultimate objective of mobilizing resources for investment. Since 1991, the tax structure has been substantially rationalized. Changes by the Central Government include reducing customs and excise duties, lowering corporate income tax rates, extending a form of value added tax to some industries, and broadening the tax base to some services. The 1997-98 budget introduced sharp cuts in income tax rates with a view to stimulating saving and investment and encouraging higher tax compliance. Personal and corporate tax rates were reduced and rationalized to bring them down to internationally comparable levels. At the State level, the main reform has been the introduction of value added tax in 24 states and union territories in 2005.

Corporate income taxes remain politically popular, especially among those who view corporations as sources of wealth entirely independent of shareholders, employees or customers. But most modern justifications for the tax are even less unsatisfying than those relied upon historically. Some justify the tax as necessary to secure the goals of other tax regimes. When corporate income tax is part of a larger scheme of income taxation, particularly a scheme with substantial redistributive goals implemented through progressive rates, the corporate tax can be viewed as an expedient buttress to the income tax. Without a corporate tax, the personal income tax would be substantially undermined by entrepreneurs who could shift the return on their efforts into untaxed corporate profits.

Kanda et al.,\(^4\) posits that the corporate tax can serve to avoid the agency costs that would be incurred if other means were used to resolve the conflicts over timing of income among stakeholders facing different tax consequences upon corporate asset sales and distributions.
Many cross-country studies confirm a negative link between the tax burden (measured by tax revenue to GDP) and growth for high-income countries. Firm-level empirical results, as well as simulation results using computable general equilibrium models, in contrast support the view that higher taxes negatively affect growth of firms. Taxation of capital income even at a low level appears to have a distortion effect on savings, thus affecting corporate growth.

1.3 STATEMENT OF THE PROBLEM

The taxation of corporate profits in India has been one of the most widely discussed issues in the area of public finance. The share of tax revenues from corporate profits to total central government revenue from direct taxes has been increasing steadily over the decades, particularly after liberalization of economy in our country. So, increase in corporate tax revenue to government exchequer would be achieved only if there is a rapid growth of Indian industries.

As the growth of firm is mainly relied upon the optimal capital levels between debt and equity, a proper capital choice between these two sources is the backbone for the growth of any firm. However, choice of fund between debt and equity is mostly based on corporate taxation. A firm would rather go for debt than equity while mobilizing fund for new venture if it can use interest payable on fresh borrowings as tax shield and can maximize the earnings from such investments to its’ shareholders. That is, mobilization of fund from external sources for diversification and expansion process of a firm is mostly based on the corporate taxation policy of the government.
Corporate taxes raise the required rate of return on investment and thereby depress further investment through equity or retained earnings and favoring debt for further investment over equity or retained earnings. In addition to favoring debt over equity financing or retained earnings among companies that has higher insolvency risks whereas smaller companies face more difficulties in borrowing. Corporate taxes are considered for the widespread use of rebates, exemptions, and special tax regimes for specific sectors or regions. This also benefits large companies which can bear a lower tax burden through tax planning.

In India, corporate income tax or simply corporate tax was 33.66 per cent for domestic companies (including Surcharge and Education Cess), during 2006-07. Apart from the above, other corporate taxes include a 12.75 percent tax (including surcharges) on dividend distribution, minimum alternative tax on profits, tax on fringe benefits, and various withholding taxes on interest, royalties, etc. In 2004-05, the corporate tax revenue was 27.40 per cent (Rs.835.7 billion) of Rs.3049.80 billion total central government’s tax revenue. Relative to central government tax revenue of Rs.4884.5 billion, which comprises of revenues for both central government and State / Union Territory governments, the corporate income tax is 17.1 percent next to only revenue from excise duty (20.3%) and followed by revenue from customs duty (11.8%). In eight months from April 2007 to November 2007, corporate tax registered a growth of 46.62 percent at Rs.86,526 Crores, up from Rs.59,015 Crores during 2006-07. Corporate tax growth was highest in the North-Eastern region (Guwahati) at 255.64 per cent, followed by Mumbai (103.17 percent), Kerala (76.45 percent), Eastern Uttar Pradesh (71.22 percent) and Bihar & Jharkhand (51.98 percent).
According to a study published by the Associated Chambers of Commerce Industry of India (ASSOCHAM), the contribution by private sector companies to the Indian government through corporate taxes has more than doubled in the last four years ending 2005-06. Also, the ASSOCHAM claimed that the amount of corporate tax paid by India's top 50 companies soared by 189 per cent to Rs.89.95 billion (US$2.2 billion) in 2004-05. During the same period, corporate tax payments, made by state-owned companies, increased by a relatively modest 67 per cent. Total corporate tax paid by all the Indian companies increased by 159 per cent during 2004-05. It is further said that the increasing trend in corporate income tax is mainly driven by strong economic growth coupled with growing demand, rising domestic investment, and greater acquisition activities.

Corporate tax payments have risen across all sectors of the Indian economy. Due to strong growth of firms the manufacturing sector has paid 152 per cent more by way of corporate tax over the past four years upto 2005-06. Companies in the steel and metals industry registered 518 per cent growth in corporate tax payments during this period. During the period from April to December of the fiscal year 2007-08, the direct tax revenue after refund crossed Rs.2, 05,000 Crores, to post a growth of 42.4 per cent. The mop-up by way of corporate tax increased by 39.8 per cent to Rs.1, 27,683 Crores while personal income tax soared by 50 per cent to Rs.77,380 Crores. These facts envisage that there has been growth in Indian industries. But there is no empirical evidence. Hence following questions emerge:

(i) Whether increase in corporate tax is due to growth of corporate enterprises?

(ii) What is the nature of relationship between corporate tax and corporate earnings? and

(iii) How far companies have employed debt to reduce their tax liability?
1.4 OBJECTIVES OF THE STUDY

In tune with the questions raised, the following are the objectives of the study:

1) To describe corporate income tax rate, marginal tax rate, and effective tax rate of companies / corporates.

2) To empirically determine the impact of changes in corporate taxation on companies’ growth in terms of capital structure.

3) To ascertain how and when companies use debt as a shield against corporate taxation.

4) To study the impact of changes in corporate taxation on corporate earnings.

5) To identify the effect of corporate taxation on the financial healthiness of companies.

1.5 HYPOTHESES OF THE STUDY

Based on the objectives the following hypotheses are framed:

- There is no relationship between debt fund and corporate tax liability of the companies.

- There is no relationship between corporate tax and long-term debt of the companies.

- There is no relationship between corporate tax and total debt of the companies.

- There is no relationship between corporate tax and net debt of the companies.
1.6 METHODOLOGY

The present study is based on empirical analysis for examining the objectives and hypotheses framed. The method of collecting data, period of study, method of sampling technique and the justification for choosing the sample and the statistical tools used for analyzing the data are given below.

1.6.1 Data

The present study is based upon the secondary data. The secondary data for the study are the financial statements of the selected firms across cement, steel, textiles, food and pharmaceutical industries. The data were collected from PROWESS data base. Further data available from the publications the Ministry of Finance, journals, magazines, newspapers, websites etc., are also collected and used wherever necessary.

1.6.2 Period of study

The period of study is ten years i.e. from 1996-97 to 2005-06.

1.6.3 Sampling Technique

For the study fifty eight companies were selected by the stratified simple random sampling technique. The stratified random sampling technique is generally used when the population is heterogeneous or dissimilar. Companies listed in the Bombay Stock Exchange are heterogeneous in terms of size i.e. total assets. Hence fifty eight companies were selected across six industries representing Cement, Steel, Textile, Pharmaceutical, Information Technology and Food processing (Appendix-I).
1.6.4 Tools for analysis

The statistical tools used in the present study for analyzing the data are general descriptive statistics like mean and standard deviation; univariate technique like one way analysis of variance (ANOVA) also called F test; multivariate technique such as cluster analysis, multiple regression analysis and logistic regression analysis.

One way ANOVA is used to test the significance of the difference in mean shielding ratios across classified groups by comparing mean marginal tax rate, effective tax rate and tax paid in the preceding years across company groups with low, medium and high net worth.

Cluster analysis is used to group the companies into three mutually exclusive groups as low, medium and high based on level of shielding ratio (total debt to total assets ratio), net worth, etc. Multiple regression analysis is applied for ascertaining the unique impact of corporate taxation on capital structure, net worth and corporate growth.

The logistic regression technique is applied for evaluating the effect of corporate taxation on the likelihood of financial healthiness of the companies. The dependent variable in the regression model is binary in nature with value ‘0’ for unhealthy and ‘1’ for healthy firms. The healthiness and unhealthiness for firms is ascertained using Sori’s\(^5\) Z score model (bankruptcy model). Though many researchers used Altman model for bankruptcy prediction, Sori model is preferred over Altman model since it is tested in the Asian context (tested with companies in
Malaysia, a developing country) and he avoided the market value of equity in the independent set (Market value of equity is used in the Altman model and tested in European context). In the Indian context, use of market value of equity to predict firms’ healthiness (distress) can be avoided as market value of equity does not always reflect the true value of a firm. Therefore, Sori's Z score model for identifying the financial healthiness (distress) of selected firms is preferred for the present study. The model is given below:

\[ Z = 1.795 + 1.532 X_1 - 2.185 X_2 + 3.646 X_3 + 0.282 X_4 + 0.104 X_5 \]

Where,

- \( Z \) = Overall Index
- \( X_1 \) = Total Liabilities to Total Assets (Log)
- \( X_2 \) = Asset Turnover (Square Root)
- \( X_3 \) = Inventory to Total Assets
- \( X_4 \) = Sales to Inventory (Log)
- \( X_5 \) = Cash to Total Assets (Log).

A firm is classified as healthy firm if its discriminate score (overall index) has a negative value (< 0) and as non-healthy (distressed) firm if its discriminant score has a positive value (>= 0). After dividing companies in each year into healthy and unhealthy, the numerical value zero is assigned for unhealthy and one is given to healthy thus making firm’s healthiness as dichotomous variable for using in logistic regression analysis.
1.7 SCOPE OF THE STUDY

Corporate finance researchers have long been puzzled by balance between debt and equity in capital structure of their companies in order to gain corporate tax advantage. As value of firm typically reflects a growing stream of earnings, while current debt reflects a non-growing stream of interest payment, debt to value becomes a distorted measure of corporate tax shielding. Even with very small debt-related costs, this may explain the observed magnitude and cross-sectional variation of debt ratio.

Since variation in debt ratios may be independent of tax shielding, debt to equity ratios provide an inappropriate framework for empirically examining the trade-off between debt and equity in capital structure. Hence, the study may throw light on the implications to guide the managers of companies under different industries to identify the ways and means to improve their companies’ performance under varying corporate taxation policies of the government and to strike the balance between debt and equity.

1.8 LIMITATIONS OF THE STUDY

The present study is limited to six industrial sectors and the post economic liberalization era is considered for the study. Moreover, companies owned by foreign nationals are excluded in the present study. Also, the study focuses only corporate income tax on corporate earnings. Dividend distribution tax, fringe benefits tax and minimum alternate tax are not considered.
1.9 CONCEPTS AND TERMS USED

- CORPORATION

A corporation is a legal entity separate from the persons that form it. It is a legal entity owned by individual stockholders. Corporations exist as a product of corporate law, and their rules balance the interests of the shareholders that invest their capital and the employees who contribute their labour. In this study the term 'firm', or 'company' alternatively denote corporations.

- CORPORATE TAX

Corporate tax is the tax on the total income of the company computed as under the Income-tax Act.

- MARGINAL TAX RATE

A marginal tax rate is the tax rate that applies to the last amount of the tax base (taxable income or spending) and often applied to the change in one's tax obligation as income rises. It is computed by the formula.

\[ m = \frac{\Delta t}{\Delta i} \]

Where, \( m \) = marginal tax rate; \( t \) = tax liability; \( i \) = taxable income.

- EFFECTIVE TAX RATE

An effective tax rate refers to the actual rate, i.e., the rate existing in fact. The effective tax rate is the amount of tax the firm pays when all other government tax offsets or payments are applied, divided by the tax base (total income or spending). If certain groups have high degrees of tax offsets compared to other groups, their effective tax rate will be lower, even where their official tax
rates and marginal tax rates will be equal. The effective rate of tax can often be discussed in terms of the effective marginal rate of tax - namely the amount of effective tax paid as a percentage of the last rupee earned or spent.

**TAX SHIELD**

A tax shield is the reduction in income tax that results from taking an allowable deduction from taxable income. Interest on debt is a tax-deductible expense taking on debt creates a tax shield. Since a tax shield is a way to save cash flows, it increases the value of the business, and it is an important aspect of business valuation.

**NON-DEBT TAX SHIELD**

Tax deductions that are not associated with debt act as substitutes for interest deductions. These are non-debt tax shields and compete with interest as a tax deduction. Firms with higher non-debt tax shields are expected to have lower leverage, as the tax benefits of leverage are relatively less valuable. The depreciation is such tax deduction for corporations.

**BANKRUPTCY RISK**

The risk that a company will be unable to meet its debt obligations is often referred to as "default" or "insolvency risk or bankruptcy risk.

**LIKELIHOOD RATIO TEST**

In statistics, hypothesis testing is sometimes known as decision theory or simply testing. The key result around which all decision theory revolves is the likelihood ratio test. The likelihood ratio is the ratio of two probabilities of the same event under different hypothesis. The likelihood ratio is a ratio of probabilities, and can take a value between zero and infinity. The higher the ratio, the more likely it is that the first hypothesis is true.
**NET DEBT**

The "net debt" is the amount of total debt less cash holdings and other marketable securities. It is used here because cash holdings are considered as excess liquidity with which a portion of debt could be immediately redeemed.

**1.10 ORGANISATION OF CHAPTERS**

The present study is organized into Seven Chapters as follows:

- **First Chapter** deals with the Introduction and Design of the Study.
- **Second Chapter** covers the Review of existing literature on Corporate Taxation and growth of Indian industries.
- **Third Chapter** gives an overview of corporate taxation. That is, corporate income tax, marginal tax rate and effective tax rate across companies / corporate firms are discussed.
- **Fourth Chapter** examines the impact of corporate taxation on capital structure of companies. Further it also identifies how and when companies use interest on borrowings as a shield against corporate taxation.
- **Fifth Chapter** empirically analyzes the impact of corporation taxation on the growth of Indian industries. It also focuses on identifying the growth of companies under different marginal tax rates.
- **Sixth Chapter** ascertains the effect of corporate taxation on the corporate earnings. The impact of corporate tax on the financial healthiness of the companies has also been discussed in this chapter.
- **Seventh Chapter** presents the Summary of Findings, Suggestions and Conclusion.
REFERENCES


