CHAPTER-1

INTRODUCTION

1.1 INTRODUCTION

Fact remains that industrial development in the under developed and developing economy is one of the greatest challenges of our times. A serious campaign in the form of competition is on among the industrially developed countries for extending help to the less privileged non-industrial countries, to transform their economies from the primitive agricultural economy to advanced industrialised economy. This process of effort on the part of the developing countries envisages finding out quick and effective solution to the problems of poverty, insecurity and over population, which have resulted in the vicious shackles of backwardness of the non-industrial countries. They can hardly afford all by themselves the requirements warranted of for a high-tech economy. Low capital formation and backward technology handicapped them to go for overhauling their economies for setting up of a social & economic order, where full employment of materials & human assets is possible. No country now lives in isolation, nor its economy. Globalisation has accentuated the inter-dependence of economies. Globalisation is a double edgedsword, selectively used for expanding economies, can bring about the benefits of a high-tech industrialised economy. Almost all nations strive to accept globalisation as a fait accompli and more so the developing countries like India which endeavours to achieve quick pace of industrialisation to lay down a base for high-tech economy.
1.2 INVESTMENT AND CAPITAL FORMATION IN THE CORPORATE SECTOR

Among the various ingredients necessary for the healthy growth of the corporate sector, finance is considered to be of utmost importance. While marketing, management, technology, infrastructure, etc. are all crucial for the growth and continued operation of the corporate sector, availability of adequate finance and its proper use can make all the difference between survival, growth and sickness and closure. The contribution of investment and capital formation to the growth in the GDP of countries has been examined through different models by different economists.¹ In the traditional neo-classical growth model, high investment in industry would only lead to a short run increase in economic growth, which in the long-run would be determined by technical change. More recent modelling work allows investment to exert a long-run influence on growth, so that an increase in the share of investment in national income can allow a higher long-run average rate of growth in gross domestic product. Investment is also needed as a vehicle for the structural changes that are required, if resources are to be mobilised for the sectors that offer the highest returns at world market prices. Expansion in output and structural change, in turn can initiate a self reinforcing process by which the expectation of further growth encourages, investment; investment supports growth and increased income raises the savings needed to finance growth.

In most of the under-developed and developing economies of the world, there is a general insufficiency of capital resources and there are several difficulties in mobilising them for industrial investment.² While foreign investments do have a major role in a globalised market environment, their efforts are only supplementary in nature, and their availability depends on so many conditionalities. As countries industrialise, the shortage of capital become less sever because of capital accumulation within the industrial
sector. The pursuit of rapid industrial growth together with a broad distribution of industrial ownership requires among other things, the development of the capital and money market and existence of healthy financial institutions who can meet the varying investment needs of the corporate sector.\(^3\)

While availability of adequate finance at the disposal of the firm is important for capital formation, from management point of view, effective utilisation of finance is also equally important. The finance manager, in view to maximise the wealth of the firm, faces the real challenge in obtaining the required funds from the right source and seeing their right use. Financing decision involves the most important and complex areas of functional management. "The financing decision is an intricate and highly complex process and it requires choice of sources of finance to be made with great care".\(^4\) This is more so with regard to fixed assets financing as against current assets financing due to involvement of considerable amount of long-term resources which are non-reversible once invested in fixed assets.\(^5\) The fixed assets financing pattern may be different from one industry to another. "Industries differ from one another from the point of view of length and technical character of the production process, rate of technological improvement, degree of vertical integration, durability of product, income elasticity of its demand, customs of trade, time shape of operations and sales and customers as to the type of sources used. By their very nature, they also attract different degrees of Govt. control and regulation and incidence of taxation."\(^6\) The variations in the nature of industries not only causes differences in the requirement of gross fixed assets but also in the use of various sources of long-term finances among the industries.\(^7\)

A firm needs funds to invest in fixed assets and current assets. The funds invested in fixed assets are called as fixed capital and those invested in current assets were known as working capital. The nature of the funds invested in fixed assets and the permanent part of working capital is
long-term and those invested in the variable part of working capital is short-term. A firm thus needs long-term and short-term funds to meet its total capital requirements. Long-term funds are required not only to set-up a new enterprise and to keep it going, but also for its expansion, diversification and modernisation programmes.

1.3 FINANCIAL SECTOR DEVELOPMENT AND CORPORATE SECTOR

The financial sector plays the key role in the mobilisation and allocation of financial savings in the economy and in facilitating the flow of funds among the various sub-sectors, particularly the corporate sector. The Indian financial sector comprises an impressive network of banks, other financial and investment institutions and a range of financial instruments, which together function in the capital and money markets. Timely supply of short-term fund and long-term fund to the corporate sector helps the process of industrialisation in the country. Therefore, financial sector development and development of corporate sector are two sides of a coin. Finance, the life and blood of business, is truly realised at each of corporate business activities. It is equally important during the stages of promotion, operation, modernisation, expansion or diversification of business activities. There can be no finite end to the financial sector development. It is a process rather than an event. The financial sector reforms in India is an integral part of the overall programme of economic reforms, aimed at improving productivity and efficiency of the corporate sector.

The economic reforms process initiated in India since 1991 has brought about revolutionary changes in the business and operating environment of the Indian corporate sector. The wave of liberalisation, privatisation and globalisation is sweeping the economy.
Some of the important landmark decisions taken by the Government since 1991 which has directly or indirectly facilitated the growth and healthy operation of the corporate sector are briefly summarised below.

(i) The industrial licensing system was virtually abolished enabling corporates to set up new units in the previously reserved areas.

(ii) The restriction on the capacity expansion was removed, which facilitated setting up of or expansion of the existing unit into international size and enjoy scale economy.

(iii) The various liberalisation in the capital market like abolition of the office of controller of capital issues, permission of free pricing of issues, interest rate deregulation, floatation of new financial instruments and other reforms in the primary and secondary market enabled the corporate sector to access huge amount of resources and reduce their dependence on the traditional sources i.e., financial institutions.

(iv) The liberalisation of the forex market helped many well known and highly established Indian companies to access the international capital market either through the issue of equity shares via ADR/GDR or debt instruments or by raising loans from external commercial financing institutions.

(v) The removal of administered pricing mechanism in many sectors and liberalisation of various rules in the marketing arena like branding, advertisements, etc. increased the marketing edge of the domestic companies.

(vi) The permission to import raw material from the most competitive sources, up-to-date technology from any part of the globe and other liberalisation in the internal operations rules and regulations, has improved the operating efficiency and competitive strength of the Indian companies.
1.4 PROBLEMS OF THE INDIAN CORPORATE SECTOR

One decade of economic reforms has brought about a significant and far-reaching changes in operational and financial environment of the corporate sector. The Indian companies have responded very positively to the Government Policy initiative and restructured themselves to meet the challenges of the new millennium. The growth in the number of companies, their production volume, earnings in foreign exchange, etc. provide enough evidence of their new and more effective role in the economic development process. This however does not mean that they are problem free. The corporate sector continues to face multiple problems in this liberalised and transitional economy. The problems can be broadly divided into financial and non financial problem. While financial problems are concerned with source, utilisation, cost, volatility, risk, etc. the non-financial problem are more micro in nature and have a close relationship with the financial problem. A brief outline of some of the problems faced by the corporate sector in India are enumerated below:

1.4.1 Problem of Financing Mis-match

The financing principle says that while choosing the right kind of source, the corporates should follow the matching principle, which says that the characteristics of the sources of fund and the characteristics of the uses of the funds should be same. The three factors that characterise the sources and uses of funds are maturity period, cash flows and price. Assets should be financed by sources having same maturity period. Cash flows from assets being financed should at least cover the cash commitments towards the source and thirdly the expected rate of return from the assets should at least be equal to the price of the source of finance.
Indian experience shows that many corporates raise finance on convenient basis without following the above financing principles. As a result they face the problem of asset liability mis-match which can be of three types.

- **Maturity mis-match**: When long-term funds are used to finance current assets or short-term funds are used for creating fixed assets, there exists a maturity mis-match.

- **Cash flow mis-match**: If net operating cash flow (NOCF) of a corporate is less than the total financing charges (TFC) on the corporate, which includes interest charges, periodic payment of principal, lease-rents etc. thus there exists a cash flow mismatch.

- **Price mis-match**: When the cost of funds of the corporate is more than the return earned on the asset financed by the firm, there exists a price mis-match.

A company having asset liability mis-match may face a number of financial risks, namely interest rate risk, risk of default, refinancing risk, risk of loss of operating autonomy and risk of under utilisation of funds. Further if the cash flow of the firm assets being financed are not matched with the cash commitments towards the source, this may lead to liquidity constraints.

### 1.4.2 Problems of the Capital Market

Another important financing problem of the corporate sector relates to the volatilities of the Indian capital market. After a long period dullness, the Indian capital market made a revival during the first part of the 1990's. However, the occurrence of various stock scams during the last decade have shaken the confidence of the investors and a majority of them
have deserted the market. As a result, the prices of shares of most of the existing companies have nose-dived in the stock market and they have serious problems in raising resources from the primary market. For the new companies, it is still more difficult to access capital from the primary market.

1.4.3 Problems Related to Institutional Financing

In the light of an inactive capital market from 1950 to 1990, the institutional financing from specialised financial institutions played a prominent role in the provision of long-term finance to the corporate sector. After 1991, with changes in the financial market, rules and regulations, increased competition and higher degree of disintermediation, the traditional financial institutions are facing a host of problems in meeting the genuine term financing needs of the corporate sector. Coupled with the above, the increasing incidence of non-performing assets in their loan portfolio has made them more cautious and selective in assisting the corporate units.

1.4.4 Lack of an Active Debt Market

Inspite of various reforms in the capital market, most of the changes have taken place in the equity market. The debt market, especially the secondary debt market continues to be dominated by a few institutions and a few instruments. The absence of liquidity in the debt market, inspite of the presence of the Discount and Finance House of India and the Securities Trading Corporation of India has driven out many potential investors from this market. This has indirectly ensured the forced dependence of the corporate sector on the long-term loan assistance provided by the financial institutions.
1.4.5 Rapidly Changing International Financial Market

During the later part of the 1990's, a majority of the well-established companies in India raised huge amount of resources from the international financial market either through the issues of GDRs/ADRs, ECBs or other dollar dominated foreign loans. However, the continuous slow down in the international and domestic economy have adversely affected the flow of FDI and FIIs fund into India. Further due to introduction of significant changes in the trading mechanisms in the Indian stock-exchange, the scope of speculation has been reduced to a large extent. Many FIIs, who were interested in short-term capital gain have withdrawn from the market. The downgrading of the sovereign credit rating by Standard and Poor and the Moody has also adversely affected the accessibility of fund by the domestic corporate sector in the international market.

1.4.6 Changing Economic Environment

The fast changing economic and operating environment of the Indian corporate sector has very adversely affected their funding strategies. With continuous change in technology, the knowledge based enterprises are commanding a premium in their market capitalisation. They have not faced any problem in raising huge amount of resource both from domestic and external market. However, the traditional industries (also known as brick and mortar) are facing a rapid dwindling in their fortunes. These units are facing problem in raising resource not only in primary capital market in India but also in the external market.

1.5 REVIEW OF LITERATURE

There have been some attempts in the past as well as in the recent years to study the trends, pattern and different financial and structural
aspects of corporate units both in India and abroad. Most of the studies made in India are based on the data published by the RBI and the stock-exchange official Directories and are related to the private corporate sector. Some of the prominent studies relating to the financial trend and pattern are mentioned below:

1.5.1 Studies Relating the Financial Structure and Trend

Puranik\(^1\) has observed that during the period (1980-81 to 1988-89) investment in shares and debentures on an average formed 3.84 per cent part of the total household savings in financial assets. Bank deposits accounted for major part. The private corporate sector depends more on borrowing from financial institutions including banks for financing their activities.

A study was made by Agrawal\(^2\) on "capital market development, corporate financing pattern and economic growth in India" covering a period from 1980-1997. The study concluded with the observations of (i) a rising trend of resources mobilisation by the corporate sector in India from the capital market and Development Financial Institutions (DFIs) (2) In developing countries, corporate sector depends heavily on external sources of funds, with a significant share coming from the capital market.

Shah and Thomas\(^3\) (1997) observed the stock market in India is more efficient than banking system on account of the enabling Government policies and stock market development has a key role to play in the reforms of the banking system by generating competition for the funds mobilisation and allocation. They have suggested that an efficient capital market would contribute to long-term growth.

Kishori C. Shah\(^4\) analysed the trends in the savings and investments in Indian corporate sector during 1938 to 1955. He also analysed
the financial history of five industries, namely Cotton, Jute, Cement, Iron & Steel and Paper from profitability point of view.

Braj Kishore\textsuperscript{5}, who made an analysis of historical data of Joint stock companies in India from 1951-52 to 1973-74, observed the emerging trends in the financing of corporate entities in India. He observed the growing importance of internal funds over external funds, with the former registering a clear-cut rising trend and the latter a falling trend over the period. The study further revealed, external funds to have undergone drastic transformation with, however, the overall sectoral position between total debt and total equity remaining fairly stable.

Nigam and Joshi\textsuperscript{6} observed significant trends in company finances especially relating to income, appropriation of profits, capital employed and sources and uses funds in their study of 1001 Public Ltd. companies of RBI samples together as well as grouped industry-wise for the 1st and 2nd five-year plan periods.

R.K. Nigam and N.C. Choudhuri\textsuperscript{7} in their study on "Corporate sector India - A factual presentation of long and short-term trends", brought out the importance of growth of corporate sector in India, and short-term and long-term trends in growth, number and finances and capital formation of the public and private ltd. companies.

ASSOCHHAN\textsuperscript{8} sponsored a study by the Tata Economic Consultancy Service in 1977 to examine the trends in capital formation in the private corporate sector. The study concluded with the observations of (i) no growth in capital formation in real terms, (ii) corporate savings including depreciation constituted the largest components of gross resources, and (iii) long-term loans from financial institutions and raising of funds through stock exchanges have been insignificant and inadequate.
V.S. Patvardhan\textsuperscript{19} in his study observed that big companies tended to depend more and more on external resources particularly on other borrowings and that reliance on bank borrowing was increasing in smaller companies and decreasing in larger companies.

The study made by National Institute of Public Finance and Policy\textsuperscript{10} on trends in resource mobilisation in the private corporate sector pointed out that, 'measured in current prices, gross resources mobilised by the companies increased substantially up to 1965-66, and after that there seems to be no upward thrust in resources mobilised except for the abnormal increases in the two high rate inflationary years of 1973-74 and 1974-75.

The study made by Kothre and Menon\textsuperscript{11} on behalf of the RBI on Cotton textile industry for the period 1950-51 to 1974-75 revealed irregular trends in sales income and declining trends in the profitability of the industry. The study further revealed that the dependence on the borrowings from banks and financial institutions for fixed assets financing was quite heavy.

### 1.5.2 Econometric Studies

Bagchi's\textsuperscript{12} work was one of the earliest studies based on cross section analysis of 27 industries. The data used in this study was the data published by the RBI. The study concluded with the observation that profits after tax have more powerful influence on the level of investment than changes in sales."

Krishnamurthy's\textsuperscript{13} study was concluded with the observation that capacity utilisation, profits and long rates of interest have influences on the determination of private investment in machinery & equipment in the private corporate from 1948-61.

The study made by Sastry\textsuperscript{14} on the basis of individual balance sheet of Public ltd. for the period (1955-60) was another major attempts to
analyse investments, dividends and external financing and their interdependence. Sastry's model while explaining external financing in relation to gross retained earnings investment and stock of net debt, indicated 'external finance to be a negatively sloped function of stock of net-debt and gross retained earnings, and a positively sloped function of investment outlays.

The result which Sarkar\textsuperscript{15} found in his study was that profit investment relationship was more pronounced than investment sales relationship. He examined the bivariate relationship of investments with changes in sales, lagged profits and interest rate for several individual industries for the period 1950-65.

Krishnamurty & Sastry\textsuperscript{16} made a comprehensive study on manufactures' inventories by taking 21 individual industries. The role of output/sales, utilisation of productive capacity, interest rate, bank finance and price anticipations that have a bearing on inventory holding was analysed in the study while all the variables were found to have some relevance, bank finance and interest rates were more prominent.

In their cross section study of the finances of Public Limited companies, in the Chemical industry, Krishnamurthy and Sastry\textsuperscript{17} estimated the external finance equation very much similar to the one estimated by Sastry in the capital goods industry. The main findings of this study were that "retained earnings exert its influence on investment when the supply of funds is limited on account of past profit" and "the impact of external finance is felt on investment when money-capital markets are tight.

Krishnamurty and Sastry\textsuperscript{18}, in their yet another elaborate study, tried to measure the relationship between net flow of debt and gross fixed assets. The explanatory variables they used were gross retained earnings representing internal resources, investment outlays representing the demand
for funds and the stock of net debt representing the risk factor. It was found in this study that, the coefficient of the stock of net debt was negative for all the seven sample industries studied, and was significant for five industries, namely, Jute, Sugar, Paper, Chemicals and Engineering. The study further revealed the impact of retained earnings on the flow of external finance to be negative and significant in all the industries.

Venkatachalam and Sharma\textsuperscript{19} found 'Cost of credit' to be the determining factor for the volume of borrowing from commercial banks by the private corporate sector. This finding is in direct contrast to the conclusion of Swamy and Rao that "it is the availability of finance rather than the cost of credit that affects the pattern of corporate finance".

Bhole\textsuperscript{20} in his study observed that the level of saving ratio of companies depends upon the type, size and industry. Larger companies have higher saving ratio than smaller companies. An important finding of the study was that, in case of large companies, net profit after tax (and not cash flow) determines the savings ratio whereas in case of small companies, the cash flow, availability and cost of external funds and the price level determine the savings ratio.

Rao and Vivekananda\textsuperscript{21} in their study indicated that the most important determinant of corporate savings is corporate income, and savings are positively correlated to investment, demand and liquidity position.

Sharma\textsuperscript{22} in his study, on 'Corporate Finance Structure' concluded that the Indian Automobile industry has followed the policy of 'trading on equity' for the benefit of the shareholders. He further observed that the common size percentage of fixed asset has always been higher than the percentage of net worth.

Gangadhar\textsuperscript{23} in his study on "Finance trends in the Indian Corporate Sector", observed that in medium and large companies, debt forms
significantly higher proportion in the total capital structure as compared to small-companies.

One important empirical observation inconsistent with the static trade-off theory is that "most profitable firms tend to borrow the least". Brealey and Myers\textsuperscript{24} point out that, according to trade-off theory, high profits should mean more debt servicing capacity and more taxable income to shield, resulting in a higher optimal debt ratio. Myers explains the positive relationship between profitability and the debt equity ratio using what he calls the 'packing order' theory. This is based on the assumption that firms have a preference for internal finance. If internal finance is inadequate then they first issue debt, followed by hybrid securities such as convertible bonds and equity as a last resort. Managers may prefer internal financing because it relieves them from the disciplining effects of the securities market.

Remmers, Stonehill, Wright and Beekhuisen\textsuperscript{25} in their study 'Industry and Size as Debt ratio determinants in Manufacturing Internationally' observed that the two determinants, namely, industry and size, believed to influence corporate financial structure, probably do not warrant the credence they receive. Thus, while they accept that industry and size do influence capital structure but not always. They concluded that certain other variables such as earnings rate, growth rate etc. seem to be more important determinants of debt ratios internationally.

Manak C. Gupta\textsuperscript{26} while studying the effect of size, growth and industry on the financial structure of manufacturing companies, observed that (i) activity ratios and leverage ratios decrease with increase in the size of the corporation, but they increase with the growth of the corporation; (ii) liquidity ratios rise with an increase in the size of the corporation and fall with the growth rates; (iii) large-sized corporations tend to have higher profit margins on sales than the smaller-sized corporations.
While promising a superior result, Ferri and Jone\textsuperscript{27} undertook a study entitled "Determinants of Financial Structure: A New Methodological approach" by taking a sample of 233 SIC (Standard Industrial Classification) code firms. The objective of the study was to "investigate the relationship between a firm's financial structure and its industrial class, size, variability of income (i.e., risk) and operating leverage. The study was concluded with the following observations:

i. Industry class is linked to a firm's leverage, but in a less pronounced and direct manner than has been previously suggested;

ii. A firm's use of debt is related to its size, but the relationship does not confirm to the positive, linear scheme that has been indicated in other work;

iii. Variation in income, measured in several ways, could not be shown to be associated with a firm's leverage; and

iv. Operating leverage does influence the percentage of debt in a firm's financial structure, and the relationship between these two types of leverage is quite similar to the negative, linear form which financial theory would suggest.

Oliver E. Williamson\textsuperscript{28} in his paper "Corporate Finance" and "Corporate Governance" argues that whether a project should be financed by debt or equity depends principally on the characteristics of the assets. He observes, "transaction-cost reasoning supports the use of debt to finance redeployable assets, while non-redeployable assets are financed by equity".

1.6 RELEVANCE OF THE STUDY

A lot of changes have taken place in the Indian financial scenario during the last three decades. This is particularly true in the context
of the eighties when the Indian financial market assumed a structural change, a change both in terms of institutions, instruments and market, i.e., money market and the capital market. Prior to eighties only a few industrial units operating mostly under the small and medium scale industries were there who could easily manage to obtain and meet their financial requirements by making borrowing from financial institutions and banks. However, increase in the number as well as size of these companies, the financial institutions found it difficult to meet the financial requirements of all companies in general and of the private sector companies in particular, thus enforcing them to look into alternative sources of finance. Moreover, the changes in the Government policy towards industrialisation; the changes in the economic policy with increasing emphasis on liberalisation and open market system, transformation of the domestic market from sellers to buyers; increasing incentives for global investments; establishment of Securities and Exchange Board of India (SEBI) and its dominating role in the capital market; reforms in the financial sector as recommended by the Narasinghham Committee especially to keep all financial institutions and banks under the direct supervision and control of an apex body in a view to control and regulate their independent functioning; emergence of new financial means and instruments like Global Depository Receipts (GDR), Euro-Issues, Foreign Direct Investments (FDI), Mutual Funds; Certificates of Deposit (CD), Commercial Papers (CP), futures, options, swaps, factoring, lease financing and so on, have rendered the Indian Financial market, that existed prior to 1980, a complete obsolete.

The change in the financial market certainly has got impact on the financing pattern of corporate units, including the private sector companies in India. A need at the present juncture is therefore felt to study the impact of such changes on the financing pattern of private corporate sector and hence the research problem "A Study on the Growth and
Financing Pattern of Corporate Sector in India. The topic has particular relevance to the changes in the capital market in the eighties and the effect of such changes on the financial structure of Private Sector Companies. This particular topic has been selected for study because no continuous effort has been made to examine the changes that might have occurred in the financial structure of the Indian corporate units due to the changes in the financial market, changes in the Government policy and so on. A sample of Private Sector Companies have been selected for study because they almost represent the wider segment of industries hence determine, the financial structure of the entire corporate sector in India.

The present study has also considerable relevance to the prospective financial structure of the sample companies. The study provides enough insight into the size and the composition of long-term, short-term, internal and external sources of financing the Private Sector Companies in India. The study strives to determine the factors which significantly influence the corporate capital structure. As such, the study is expected to help the corporate management, the financiers, the investors and the Government at large, to take valuable decisions at their own end.

The knowledge of corporate financial pattern and the factors affecting such pattern, will also help the financiers to appraise the genuine financial needs of the corporate firms. The investors too can make a rational judgement about the degree of their financial risk.

The study has academic relevance too in so far as new theoretical and practical knowledge would be added to the existing stock of knowledge. Undoubtedly the present study will act as an eye-opener on the subject for further research and development.
1.7 OBJECTIVES OF THE STUDY

The primary objective of the study is to examine the trends in the growth and financing pattern of the corporate sector in India. The specific objectives are:

1. To examine the growth and development of the private corporate sector in India during the plan periods.
2. To study the emerging sources of corporate finance in the globalised and liberalised market environment.
3. To study the trends of incremental investment in fixed assets and current assets and long-term and short-term financing sources.
4. To identify the determinants of both gross fixed investments and inventory investment and the financing pattern of such investment.
5. To analyse the industrywise variation in the short-term and long-term financing pattern of investment.
6. To examine the role of institutional agencies in meeting the various financing needs of the corporate sector.

1.8 RESEARCH DESIGN

The research design for the present study is descriptive and analytical in which the ex-post facto approach has been followed. Accordingly at the planning stage, the specific objectives were set-up to provide the basis for enquiry. In the light of the objectives, the scope of study, the methodology of data collection, period of studies, sampling design, tools of analysis etc. were decided. Besides, the present section also describe the important variables used in the analysis, the key terms, hypothesis to be tested in the course of analysis and the limitation of the study.
1.8.1 Scope of the Study

The study covers a fairly wide spectrum of the manufacturing industries of the private corporate sector in India and is limited to a time series analysis of the financial data for a period of eighteen years from 1980-81 to 1997-98.

The analysis is made for eight selected industries working in the line of production of consumer, intermediate and capital goods. The eight industries are Papers & Pulp, Cement, Metal and Alloys, General Engineering, Chemical and Paints, Pharmaceutical, Food Products and Cotton & Weaving. Among these industries Food Products and Pharmaceutical are included in the consumer goods industries; Paper & Pulp, Chemical and Paints, Cotton & Weaving are in intermediate Goods Industries while Cement, General Engineering and Metal Alloys are included in capital goods industries. The combined weight of these industries is near about two-thirds of the overall index of industrial production.

In analysing the growth and financing trends of private corporate sector, attention is concentrated on Non-Government and non-financial public limited companies only having a paid-up capital of Rs.25.00 lacs and above as shown in their financial statements, because these constitute the most important segment of the corporate sector in India.

The present study includes the analysis of corporate growth in India in different states and regions and their financing pattern. The 1st part of the study is confined to examining the corporate growth and the 2nd part analyses the specific/different pattern of the sources from which the selected companies have raised capital during the period under study. Hence, the growth of corporate sector and its financing pattern are the main focus of the study.
1.8.2 Hypothesis of the Study

The study is based on the following hypothesis and their validity is tested in the course of analysis.

1. Flow of funds from long-term sources is generally influenced by the investments in fixed assets.
2. Flow of funds from short-term sources is generally influenced by the investments in current assets.
3. Variations in gross fixed assets investments is related to the changes in internally generated funds, share capital and long-term debt.
4. Variations in the inventories investment is related to the variations in trade credit, internally generated funds and bank borrowing for working capital.
5. Internal funds play a significant role in financing of the companies.

1.8.3 Sources of Data

The study is purely based on the data collected from the following secondary sources:

1. Information relating to growth and development of industries during different plan periods have been collected from various plan documents of Planning Commission, Govt. of India, New Delhi.
2. Information relating to number, type, size and industrywise distribution of joint stock companies in different regions/states have been obtained from the various Annual Reports on the Working and Administration of the Companies Act, 1956, Ministry of Finance, Deptt. of Company Affairs, Government of India, New Delhi and Company News & Notes.
3. Data for the purpose of analysing the financing pattern of corporate sector, have been collected from the various volumes of the Stock
4. Analysis of institutional finance for industry is based on the data collected from the "Report on Development Banking in India", published by IDBI, Mumbai, for different years.

5. The other important statistical data on which the study is based have been collected from Reports of the Centre for Monitoring: Indian Economy, Research Division of Economic Times and SBI Monthly Review, etc.

6. While scanning the data from the various sources, attempt has been made to include only private sector companies and maintain uniformity in the accounting year.

1.8.4 Selection of Sample

Keeping in view the objective and scope of the study, it has been decided to select companies on the basis of purposive sampling rather than taking the whole thing. Eight different industries and each having ten companies operating in different parts of the country are considered in the sample.

The selection of sample companies & industries is based on the fact that they are all manufacturing industries and belong to both traditional & modern categories.

Industries like General Engineering, Pharmaceutical, Food Products and Chemical and Paints are in the modern group of industries. The traditional industries include Cement, Cotton and Weaving, Metal & Alloys and Paper & Pulp.

While selecting the sample, stress has been given on the continuity and homogeneity of data, since it is the pre-requisite for studying
the financing pattern of the corporate sector in India. Here, the sample is the representative of the entire organised private sector in India in terms of paid-up capital.

1.8.5 Sampling Design

The different classifications in terms of age, size, region & industry are as follows.

1. On the basis of Age:

The sample is classified under this variable according to the period of operation of the companies which has been divided into three phases.

<table>
<thead>
<tr>
<th>Period of commencement</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 1960</td>
<td>25</td>
</tr>
<tr>
<td>1960-1980</td>
<td>30</td>
</tr>
<tr>
<td>After 1980</td>
<td>25</td>
</tr>
</tbody>
</table>

2. On the basis of size:

Here the sample is classified on the basis of size taking the paid-up capital into consideration.

<table>
<thead>
<tr>
<th>Size group paid up capital</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 lakhs to 50 lakhs</td>
<td>30</td>
</tr>
<tr>
<td>50 lakhs to 75 lakhs</td>
<td>25</td>
</tr>
<tr>
<td>More than 75 lakhs</td>
<td>25</td>
</tr>
</tbody>
</table>
3. On the basis of industry

Here the sample is classified into different industrial groups because the financing pattern of industries is different according to their nature and this industrial classification gives an idea of the coverage of sample.

<table>
<thead>
<tr>
<th>Nature of the goods</th>
<th>Name of industry</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer goods</td>
<td>Food products, Pharmaceutical</td>
<td>2</td>
</tr>
<tr>
<td>Intermediate goods</td>
<td>Paper &amp; Pulp, Chemicals &amp; Paints, Cotton &amp; Weaving</td>
<td>3</td>
</tr>
<tr>
<td>Capital goods</td>
<td>Cement, General Engineering, Metal &amp; Alloys</td>
<td>3</td>
</tr>
</tbody>
</table>

4. On the basis of region

Here the sample is classified on the basis of geographical location. The growth and development of a particular industry is very well affected by the area in which it is operating. The sample has been divided into the following regions.

<table>
<thead>
<tr>
<th>Regions</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>10</td>
</tr>
<tr>
<td>Western</td>
<td>30</td>
</tr>
<tr>
<td>Northern</td>
<td>15</td>
</tr>
<tr>
<td>Southern</td>
<td>15</td>
</tr>
<tr>
<td>Central</td>
<td>10</td>
</tr>
</tbody>
</table>

Hence, after classification into different groups, the financing trend of each variable is identified and compared with that of the general trend of the total sample. In addition to this, individual group of sample has
been examined to locate and explain the nature and the trend of their movement in the process of overall growth and financing pattern.

1.8.6 The Period of the Study

The period of study is confined to 18 years from 1980-81 to 1997-98. Corporate activities in the country have undergone rapid changes during the period due to policy decisions of the government and the amendment of the company legislation.

The important committees such as Chakravorty committee (1982), Vaghul Committee (1986) G.S. Patel Committee (1984), Abid Hussain Committee (1987), S.A. Dave Committee (1987) were setup for the diversification, innovation and liberalisation in the money market and capital market of the country. After the economic liberalisation in 1991, the entire financial and corporate sector have undergone a sea-saw change and the present scenario is characterised by financial innovation and financial creativity.

This period covers the entire 6th plan (1980-85), 7th plan (1985-90), 8th plan (1992-97) and a part of the 9th plan (1997-2002) which reflected a significant industrial growth in the country.

It has also witnessed the changes in the basic industrial policy of the government due to changes in political party at centre, i.e., from Congress to Janata Dal, again Congress and then BJP led National Democratic Alliance.

After all, by the time the research work was commenced, the data upto the period of 1998 of the sample companies was available in the Stock Exchange Official Directory, Mumbai.
Eighteen years period is considered to be sufficient to focus light on the growth and financing pattern of corporate sector covering both pre and post-liberalisation period.

1.8.7 Techniques of Analysis

The data collected from the financial statements of the companies are analysed with the help of different statistical and accounting tools.

The various statistical techniques used in the study are multiple regression, arithmetic average, ANOVA (Analysis of Variance), F-test, coefficient of correlation, percentages and graphs. The accounting techniques are ratio analysis, common size statements analysis, comparative statement analysis and trend analysis.

For the purpose of testing the hypothesis ANOVA, F-test, coefficient of correlation ad coefficient of variance have been used. While regression has been used to quantify the effects of the factors determining the financial structure of sample companies. Arithmetic Average, Percentage, graphs and the accounting techniques are used mostly for analysing and highlighting the growth and financing trend of corporate sector in India.

In the process of analysis, the total period of study has been divided into two slightly unequal halves, from 1980-81 to 1989-90 and from 1990-91 to 1997-98 representing the pre- & post-liberalisation period. This is because the capital market has a direct relationship with the growth and financing trend of corporate sector.

1.8.8 Explanation of techniques

(i) Correlation analysis: It aims at establishing the relationship between two variables, for example between fixed assets investment and long-term fund
and between inventory investment and short-term funds. It can be calculated as follows:

\[ r = \frac{\sum xy}{N\sigma_x\sigma_y} \]

where,
- \( r \) = co-efficient of correlation
- \( x \) = deviation of first variable from its Mean.
- \( y \) = deviation of the second variable from its Mean.
- \( \sum xy \) = total of the product of the deviations of the first and the second variable.
- \( N \) = number of pairs of the variables.
- \( \sigma_x \) = standard deviation of the first variable.
- \( \sigma_y \) = standard deviation of the second variable.

The value of 'r' must be in between ± 1 in order to have perfect correlation.

(ii) **Multiple regression analysis**: It is an extension of the simple regression analysis and it takes into account the effect of more than one independent variables (X) on the dependent variable (Y). It is a technique to investigate the effect on (y) of several variables combinely and individually. It has been applied to analyse the determinants of external finance and find out the pattern of financing the fixed investments and inventories.

Stepwise regression technique begins with the simple correlation matrix and enters into regression of the independent variable, most highly correlated with the dependent variable. It is calculated as follows:

\[ y_1 = a_0 + a_1x_1 + a_2x_2 + a_3x_3 \]
\[ y_2 = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 \]
where, $y_1$ and $y_2$ are dependent variables.

$x_i$'s are independent variables.

\[ \begin{align*}
\{ a_0, a_1, a_2, a_3 \} & \quad \text{regression coefficients} \\
\{ \beta_0, \beta_1, \beta_2, \beta_3 \} & 
\end{align*} \]

(iii) Ratio Analysis: It is a technique of analysis and interpretation of financial statements. A ratio is a mathematical expression of one number to another. It is an expression of the quantitative relationship between two numbers in several ways like as proportion, percentage, so many times of unit or as quotients.

The ratio analysis technique involves the following four stages:

1. selection of relevant data from financial statements basing on the objectives of analysis,
2. Computation of appropriate ratios,
3. Comparison of the ratios with the given standard,

(v) Common size statement analysis: It is also known as component percentage or 100 percent statements because every individual item is stated as percentage of the total 100. Here balance sheet and income statement, are shown in analytical percentage.

The total assets are taken as 100 and different assets are expressed as a percentage of the total. Similarly, liability side of balance sheet and income statement are expressed.

It aims at reflecting the position of individual item in the total.

(vi) Comparative statement analysis: The comparative financial statements are statements of the financial position at different periods of time. The
analysis is made to give an idea of financial position at two or more periods, the elements of the financial position are shown in a comparative form. The analysis is made in the following ways.

1. In absolute figures (Rupees amount).
2. Changes in absolute figures, i.e. rise or fall in absolute figures.
3. Absolute data in terms of percentages.
4. Rise of fall in terms of percentages.

(vii) Trend Analysis: This method determines the direction upwards or downwards and involves the computation of the percentage relationship that each statement item bears to the same item in base year. It emphasises the changes in the financial operating data from year to year and make possible a horizontal study of the data.

It is used in studying the various variables in company finance the trend in the sources of finance-external and internal and the period of finance –short-term & long-term.

1.8.9 Explanation of the Key Terms

Capital structure: It is the interrelationship between long-term sources of financing represented by long-term debt, preference share capital and net worth (ordinary share capital plus reserves & surplus).

Financial structure: It is the entire liability and share capital side of the balance sheet. It is the total of capital structure and current liabilities.

Cost of Capital: It is the rate of return required by the suppliers of funds. It is the minimum required rate of return that the funds used should produce
to justify their use with the firm in the light of wealth maximisation principle. In capital budgeting, it is used as cut-off rate/hurdle rate/discount rate.

Current Assets: These assets can be converted into cash within an accounting year or within the operating cycle, which ever is later. It includes inventories, sundry debtors, bills receivables, cash, bank balances & other accruals, if any.

Current liabilities: Liabilities that are payable within the accounting year or operating cycle. It includes creditors, bank overdraft, bills payable, outstanding liabilities, unsecured loans & deposits and provision for taxation etc.

Equity: It is the net worth of a business consisting of share capital and reserves & surplus. Common equity is that part of the total net worth that belongs to common (or ordinary) shareholders. Total equity will also include preference share capital. However the term "net worth", "common stock", "common equity", "proprietors fund" and "equity" are frequently used interchangeably.

Long-term debts: Borrowing through floatation of debentures, mortgage of fixed assets at banks & term lending institutions, public deposits and borrowing from the government are included in this item.

Short-term borrowing: All borrowing from bank except against mortgage of fixed assets, short-term loans from company directors and others raised during the year come under this head.
Fixed assets: They represent investment in the permanent assets like land, building, plant & machineries, etc. Such fixed assets along with the current assets generate revenues for the organisation. Gross fixed assets refer to the total value of fixed assets, i.e., including depreciation amount.

Financial Leverage: The use of long-term fixed interest-bearing debt and preference share capital along with equity share capital is called financial leverage. It is the process of magnifying the shareholder earnings by the use of fixed return securities and also called "trading on equity".

It is calculated as:

\[
\frac{\text{Earning before interest & tax}}{\text{Earning before interest & tax} - \text{interest & preference div.}}
\]

Operating leverage: It is extent to which fixed costs are used in a firm's operation. Break even analysis is used to measure the extent to which it is employed. The degree of it depends upon the amount of fixed elements in the cost structure. It is calculated as:

\[
\frac{\text{Contribution}}{\text{Operating profit}} = \frac{\text{Contribution}}{\text{Earning before Int. & taxes}}
\]

Contribution = sales - variable cost, Operating profit = contribution - fixed cost

Income gearing: The ratio of interest to earning before interest & tax (EBIT) has been taken as income gearing.

Capital gearing: It is used to describe the relationship between equity share capital including reserves and surplus to preference share capital and other fixed interest-bearing loans.
If the latter exceeds the former, then the firm is said to be highly geared. On the reverse case, it is low geared.

It is calculated as:

\[
\frac{\text{Equity share capital + Reserve & surplus}}{\text{Preference capital + long-term debt bearing fixed interest}}
\]

**Financial risk**: The common shareholders risk resulting from the use of debt. Debt causes financial risk by increasing the variability of the shareholders' return and threatening the solvency of the firm.

**Debt-equity ratio**: It is also known as external-internal equity ratio and calculated to measure the relative claims of outsiders and the owners (i.e., shareholders) against the assets of the firm. The ratio indicates the relationship between creditors funds and owners fund. It analyses the long-term financial position and test the long-term solvency of the firm.

**Current ratio**: It shows the relationship between current assets and current liabilities. It is also known as working capital ratio. It is widely used to make the analysis of a short-term financial position or liquidity of a firm.

**Operating risk**: It is the risk of being unable to cover fixed cost.

**External financing**: It constitutes share capital, borrowings, trade dues, other current liabilities and miscellaneous non-current liabilities. It is financed from outside the organisation.
Internal Financing: It is the funds made available for investments in fixed assets or current assets through the normal operations of the firm. "Reserves and surplus" and "provisions" constitute the form of internal financing.

Short-term financing: Funds arranged by the organisation to meet 'Trade dues', current liabilities and other current provisions & short-term obligations. It is financed by the money market instruments like call money, commercial papers & commercial bills etc.

Long-term financing: Funds arranged by the organisation to meet its long-term commitment. It is financed by the capital market instruments like equity shares, preference shares, debentures, zero coupon bonds & deep discount bonds, etc. Long-term fund = Net worth + Long-term debt

Inventories: Inventories consist of raw materials, work-in-progress, finished goods, consumable stores and spares, etc.

Total tangible assets: The total assets figures of balance sheet less intangible assets consists of total tangible assets

Sales: It represents net sales, i.e., total sales less sales return. The figure represents net of rebates, discounts and inter-departmental transfer.

Net profits: It is calculated after deducting interest and tax provision from operating profits. It represents the amount available for transfer to reserves and for distribution of dividends to shareholders.
1.9 LIMITATIONS OF THE STUDY

The study is based on the secondary data collected from the annual reports of the listed public limited companies published in the Stock Exchange Official Directory, Mumbai; Company News and Notes, Deptt. of Company Affairs; Reports on Currency & Finances and RBI Bulletins; special reports of the Centre for Monitoring Indian Economy and publications of various economic journals & periodicals. So the limitations prevailing with the secondary data will be found in this study.

The limitations of the financial statements of the companies for the purpose of financial analysis is well known. The extent of credibility to be assigned to these statements wholly depends upon the management of the companies.

The availability of various accounting treatments and business options provide enough scope for the management to undertake manipulative exercises. In this circumstances, the models derived with the help of financial ratios are not free from defects.

The size of the sample is also restricted. Hence, the limitations of the small sample apply to this study.

The accounting year is not absolutely same for all the sample companies as a result of which uniform financial statement could not be obtained.

The various statistical techniques used for analysis have their own limitations. Similarly, proper significance test could not be made to generalise the findings of the study for the entire population.

Therefore, while using the findings of the study, the scholar has been careful and use the same judiciously taking the above stated limitations into consideration.
1.10 THE STUDY PLAN

This study is broadly divided into eight chapters. Chapter I deals with a brief introduction about the subject, review of literature, relevance of the study and objectives of the study. Research design, scope of the study, hypothesis, sources of data, selection and classification of sample, period of study, technique and process of analysis, explanation of key terms and limitations of study. Growth and development of corporate sector in India during different plan periods has been reviewed in Chapter II. Chapter III, highlights the sources of corporate finance and development in the money market and capital market in India. This is followed by analysis of pattern of assets and liabilities in Chapter IV. Chapter V brings out the pattern of investment and financing through an econometric study. Analysis of sources of finance - internal & external, short-term and long-term, is the theme of Chapter VI. This is followed by analysis of institutional finance for industry in Chapter VII. The Chapter VIII epitomises the summary of major findings, testing of hypothesis together with conclusion and scope for further research.

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