

FINANCING OF PRIVATE CORPORATE SECTOR IN INDIA 1961-62 TO 1985-86

Dissertation submitted in partial fulfilment of
the requirements for the award of
the degree of
Master of Philosophy
in Applied Economics of
Jawaharlal Nehru University, New Delhi

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**CENTRE FOR DEVELOPMENT STUDIES
TRIVANDRUM**

1989

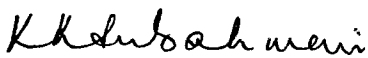
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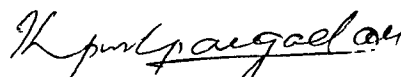
I hereby affirm that the research for this dissertation titled, "Financing of Private Corporate Sector in India, 1961-62 to 1985-86" being submitted to the Jawaharlal Nehru University for the award of the Degree of Master of Philosophy was carried out entirely by me at the Centre for Development Studies, Trivandrum.

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Certified that this dissertation is the bonafide work of Sri B.M.Misra and has not been considered for the award of any other degree by any other University. This dissertation may be forwarded for evaluation.


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ACKNOWLEDGEMENTS

At the outset, I sincerely thank my employer, the Reserve Bank of India (RBI), for deputing me to the Centre for Development Studies, Trivandrum to pursue the M.Phil. course in Applied Economics. I also thank the Department of Statistical Analysis and Computer Services, RBI for supplying me with detailed unpublished data on company finance for the use of this dissertation.

My guides Prof. K.K. Subramanian and Dr. K. Pushpangadan were sources of bountiful inspiration for this dissertation. Prof. Subramanian incited my interest on the topic from the very beginning. Despite his busy schedule, he critically examined the draft and suggested various useful modifications in shaping the dissertation to the present form. I received enormous encouragement from Dr. Pushpangadan for the use of econometric analysis in the dissertation. My discussions with him helped in clarifying many of the technical points. I am extremely grateful to both of them.

Prof. T.N. Krishnan and Prof. P.S. George were kind enough to encourage me through their intermittent inquiries about my dissertation work. I sincerely express my gratitude to them.

I have immensely benefitted from discussions at different points of time with Dr. S.L. Shetty, Dr. Prabhat Patnaik, Dr. Tapas Sen, Dr. Sampath Iyenger, Shri U.C. Dikshit and Dr. N. Nagarajan. I am grateful to all of them.

I am thankful to Shri K.S. Ramachandra Rao to have helped me in obtaining the necessary data from RBI in time.

The short sessions of academic discussion with R. Anandaraj in the hostel rooms were very useful for sharpening of some of the points raised in the dissertation. G. Nagaraju, A.S. Panth, and K.N. Das have helped me at different stages of my work relating to the dissertation. My heartfelt thanks go to them.

I am thankful to Dr. Shakti Padhi and Mrs. Sadhana Padhi for their hospitality during my stay at Trivandrum. My thanks are due to all my friends and well-wishers who made my living comfortable at the Centre.

I am thankful to Mrs. Radhamoni Sudev to have done the typing job neatly.

At the end, I pay my homage to my parents, with whom I played truants due to the pressing job requirements of the dissertation.

B.M. MISRA

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Chapter I

INTRODUCTION

The Setting

The private corporate sector¹ has been playing an important role in industrial development of the Indian economy. Although the public sector continues to be at the "commanding heights", the share of the private corporate sector in total plan outlay is increasing in recent years; the share increased from 11 per cent in the Fifth Five Year Plan to 12.3 per cent and 16.8 per cent, during the Sixth and Seventh Five Year Plan, respectively. The policy initiatives taken since early eighties towards "liberalisation", (e.g., delicensing, broadbanding, automatic expansion, raising of asset limit for MRTP units etc.) also have provided ample opportunities to the entrepreneurs to expand their business activities. With this expansion, mobilisation of adequate resources by the private corporate sector has become crucial. The issue becomes all the more significant as the private corporate sector is required to raise a substantial amount of funds from the market². It is, therefore, of analytical and policy interests to know as to how are resource

¹Private corporate sector refers to the companies in the private sector registered under the Indian Companies Act, 1956. These are of two types viz., (1) Public limited companies and (2) Private limited companies. The present study is confined to the non-financial public limited companies.

²It is stipulated in the Seventh Plan that the Private Corporate sector will raise directly from the household sector an amount of Rs. 8,511 crores during the plan period of which Rs. 5,600 crores (66%) will be in the form of company deposits and Rs. 2,911 crores (34%) in terms of shares and debentures.

being mobilised by the companies and how has it influenced the pattern of financing of the private corporate sector.

As industrial development proceeds in a country, new sources of loanable funds are tapped and different mechanisms are used to mobilise them. However, there are two divergent views with regard to the role of financial markets in economic development. The traditional view is that financial markets play a more or less passive role in economic development. This refers to "demand following" financial development through the creation of modern financial institutions and diversification of financial assets, as a consequence of development in the real economy. The alternative view put forward in recent years is that policy makers should move towards "supply leading" phenomenon in the sense of deliberately creating financial institutions, instruments and services in advance of demand. India has followed the "supply leading" approach and strengthened the financial system through deliberate steps like establishment of development banks, nationalisation of commercial banks, etc³.

Along with the development of the financial system, the capital market in India has become very active, particularly in recent years. Capital raised by companies in the private sector through issues of shares and debentures has shown a sudden spurt in the eighties after remaining almost stagnant at around Rs.100 crores a year during the 1960's and up to the late 1970's. The amount of capital raised by the non-government public and private companies averaged Rs.820 crores per year during the period 1983-

³N.A.Mujumdar (1989).

84 to 1985-86. Relaxation of capital control norms has helped such developments. These developments would have led to a change in the pattern of financing of the private corporate sector in India.

Pattern of financing refers to the raising of resources from different sources and through different instruments. Each source and instrument of finance has its own significance and influence on the functioning of the corporate sector⁴. The main sources of finance are (i) internal and (ii) external.

Internal sources of funds comprise of paid-up-capital, reserves & surplus, and provisions. To the extent to which internal funds finance the operations of the companies, they are made independent of the capital market and their financial policy may not be adjusted to suit the needs of the capital market. According to the Rangarajan Committee Report, "even on a conservative estimate, the private corporate sector should be in a position to generate internal savings at least of the order of 50 per cent of the total investment contemplated"⁵.

To the extent that the financial requirements of a firm cannot fully be met by its internal sources, the recourse to external sources becomes necessary. External funds can be raised from the household sector, public financial institutions or rest of the world (foreign sources). The household sector may provide

⁴G.Balkrishnan (1966), pp.1448-1453.

⁵Report of the Study Group on Financing Private Corporate Sector in the Sixth Five Year Plan (1982) [Rangarajan Committee Report], p.30.

capital to the private corporate sector either through direct flows in terms of shares/debentures and public deposits or through indirect flows in the form of bank deposits, life funds and units with UTI or in the form of trade credit. Of the modes of flow of funds from the household sector to the private corporate sector the direct flow assumes relative importance as greater degree of discretion is exercised by the household sector in deciding to save through these instruments. Funds going into these instruments would mainly come out of the pool that the household sector proposes to save for a longer period.

Recourse to the capital market helps the corporate sector to be self-reliant. An active capital market with a wide variety of instruments would enable the corporate sector to raise funds on its own and also would serve to augment the flow of savings in the economy in the financial form⁶. Share capital (equity) is known as risk capital and an increase in its importance would mean that the flow of risk capital to industrial ventures is increasing. Risk capital enables industrial enterprises to provide for, and protect against, the numerous uncertainties which are inherent in the business environment. Equity capital plays a pivotal role in the initial formation and subsequent growth of the business enterprise in a free enterprise

⁶Our study covers the period up to 1985-86. However, many important developments in the financial system having bearings upon the capital and money markets have taken place thereafter. They include setting up of mutual funds/venture capital funds, Discount House and Finance India Ltd., Stock Holding Corporation of India, Security and Exchange Board of India, Credit Rating and Information Services India Ltd. etc., and introduction of two new instruments in the money market, viz., commercial papers and certificate of deposits.

economy⁷.

Debentures, as a source of finance, impose a definite liability on the company to pay fixed rates of interest and an increase in the reliance placed on debentures by companies would indicate that the solvency of the company is going down. Same is the case with public deposits also. Borrowings from public sector lending institutions have certain advantages in as much as thereby the investment projects are required to go through some rigorous scrutiny and satisfy certain criteria of viability and social priority⁸.

We may mention here that there are no fixed norms on the optimum proportions between internal finance and external finance and between debt and equity. Such proportions depend on the type of the industry, the phase of cycle in which the industry finds itself, local financing habits and the criteria applied by the banks and financial institutions to borrowings. Factors, such as, large growth in the number of industrial units, diversification of existing units and increase in industrial production have led the private corporate sector in India to mobilise a substantial amount of financial resources.

A detailed study of the financing of the corporate sector is needed to understand the trends in the mobilisation of financial resources by the corporate sector, to comprehend the changing composition of different sources of funds and to bring

⁷V.P.Chitale (1983), p. vii.

⁸Rangarajan Committee Report (1982), p.51.

out the economic significance of the changing composition. The present study is an attempt in that direction. The scope and objectives of the study may be defined in the light of a brief review of literature on corporate financing in general, and the empirical studies on India in particular.

A Brief Review of Literature

Corporate Capital Structure

We may begin with a review of theoretical discussions on corporate capital structure. The capital structure of corporations, either individually or in the aggregate, is the joint product of decisions taken by claim-issuing corporations and claim-holding investors. The capital structure existing at any time point reflects the cumulative results of the entire history of corporate decisions on what kind of claims to issue, and how much of each in response to the associated history of the relevant market prices. Changes in the capital structure overtime, therefore, reflect corporate responses either to changing non-financial influences or to changes in the financial market environment, which, in turn, stem from the investor's responses to a wide variety of economic and non-economic factors⁹.

The sources of capital for a firm, as we know, include retained earnings, equity and debt securities or new equity. Indeed the decision to raise external funds at all or to rely on internal equity addition, are key ways in which individual

⁹Benjamin M. Friedman(1986), p.2.

business corporations respond to the incentives and signals provided by the financial market. However, it is puzzling to know how firms choose their capital structures.

Myers throws some light on this aspect in his famous article "The Capital Structure Puzzle"¹⁰. He speaks of a "Pecking Order Theory" according to which the firms' financing follow an order or sequence of sources as below:

(i) Firms prefer internal finance.

(ii) They adapt their target dividend payout ratios to their investment opportunities, although dividends are sticky and target payout ratios are only gradually adjusted to shifts in the extent of valuable investment opportunities.

(iii) Sticky dividend policies, plus unpredictable fluctuations in profitability and investment opportunities, mean that internally-generated cash flows may be more or less than investment outlays. If it is less, then the firm first draws down its cash balance or marketable securities portfolio.

(iv) If external finance is required, firms issue the safest security first. That is, they start with debt, then possibly hybrid securities such as convertible bonds, then perhaps equity as a last resort.

Fazzari and others described the Pecking Order Theory in terms of financing hierarchy¹¹. They presumed that the cost of capital differs by sources of funds, cost of internal funds (retained profit) being the lowest followed by the new debt financing and new equity financing. They ascribed the differences in costs between internal and external sources of funds to transaction costs, tax advantages, agency problem, costs of financial distress and asymmetric information.

¹⁰S.C.Myers (1984), p.581.

¹¹S.M.Fazzari et al.(1988), pp.148-157.

The Pecking Order hypothesis comes through loud and clear in Donaldson's study of the financing practices of a sample of large corporations¹². He observed that "management strongly favoured internal generation as a source of new funds except for occasional unavoidable bulges in the need for funds". Given that external finance was needed, managers rarely thought of issuing stock.

When one looks at the aggregates, the heavy reliance on internal finance and debt is discernible through out the past. In the past, British companies have found about 70 per cent of the capital they needed to finance their growth from their own profitable operations¹³. Over the decade 1973-82, internally generated cash covered, on an average, 62 per cent of capital expenditures including investment in inventory and current assets of the non-financial corporations in the United States. The bulk of required external financing came from borrowings. Net new stock issues were never more than 6 per cent of external financing¹⁴. During the period 1961-76, more than 50 per cent of funds for the private corporate sector in India came from internal sources.

Writers on "managerial capitalism" have interpreted firm's reliance on internal finance as a by-product of the separation of ownership and control. Professional managers avoid

¹²G.Donaldson (1961), p.67.

¹³L.E. Rockley (1972), p.27.

¹⁴S.C.Myers (1984), p.582.

relying on external finances because it would subject them to the disciplines of the capital market.

Retained Profit

Retained profit, which refers to internal savings of the firms, constitutes a significant source of internal funds¹⁵. A look into the factors which influence retained profit is worthwhile. The classic work on profit retention done by Dobrovolsky way back in 1951 still has relevance for the present period¹⁶. Taking the clue from Tinbergen's work relating to dividend¹⁷, Dobrovolsky tried to establish in the framework of ordinary least square regression that retained profit varied directly with current net income (profit after tax) and inversely with preceding years' net income and surplus. However, he subsequently established that retained profit depended upon three variables viz., current net income, dividends in the preceding year and operating asset expansion.

External Financing

As we know, there is a limit to the generation of internal funds. Although, at any given level of investment more corporate savings implies less need for external funds, it is equally true that under conditions of fluctuating investment requirements corporate savings and external financing may

¹⁵There are other internal sources of funds like depreciation provision and investment allowance reserves which are mostly governed by rules and regulations of the tax authorities.

¹⁶S.P.Dobrovolsky (1951).

¹⁷J.Tinbergen(1939), Vol-ii, pp.115-116.

increase or decrease together. According to Dobrovolsky, both large and small corporations showed a tendency to increase the use of external as well as internal funds with increase in the rate at which their assets expanded. At low asset expansion rates income retention provided, in general, a sufficient amount of funds or even more than what was necessary to meet a company's investment requirements. At higher asset expansion rates, external financing was resorted to and the relative importance of external funds rose continuously, as the rate of expansion increased¹⁸.

According to Kuh, the internal investment policies of the firm permit a limited rate of growth which can only be exceeded by the resort to external funds¹⁹. When the profits forgone become so large "that it hurts", business will overcome their reluctance to borrow or acquire additional common stock. According to him the enterprise resorting to external funds can react more rapidly to a given discrepancy between actual and desired capital stock than the firm which deliberately restricts itself to internal funds only.

Dhrymes and Kurz have explained the behaviour of external finance as residually determined through the budgetary requirements that investment expenditures must equal retained earnings plus depreciation allowances plus external finance²⁰. Thus, external finance would depend upon investment and dividend.

¹⁸S.P.Dobrovolsky (1951), pp.4-6.

¹⁹E.Kuh (1971), pp.27 & 38.

²⁰Dhrymes and M.Kurz (1967),p.429.

Debt - Equity Mix

Given the fact that external financing has to be resorted to for financing growth, the question arises whether the funds will be raised through debt or equity (new issues)? The decision of corporation executives to utilize one or another type of external financing is determined by a variety of factors viz., expectations of future profits and future dividend payments, interest rates on loans, investor preference, reluctance to incur fixed indebtedness and the costs of floating different types of securities.

In the theory of corporate finance, the issue relating to debt versus equity finance in the capital structure of a firm has received a good deal of attention. The interest in this area was stimulated by the path-breaking paper of Modigliani and Miller²¹. They presented a logically consistent proof that, in a perfect capital market, in the absence of risk (arising out of the possibility of firms going bankrupt) and of no corporate taxes, the firms were indifferent between equity and debt in their capital structure. The controversy was heightened by the fact that under the assumption that the corporate tax rate is positive and that interest payments are deductible from taxable income, the Modigliani-Miller analysis implies that an optimal capital structure consists entirely of debt. However, an infinite debt-equity ratio is inconsistent with both common sense and established practice. Indeed, even Modigliani and Miller did not advocate the exclusion of equity financing and argued that a number of considerations external to their model render such a

²¹F.M.Modigliani and M.H.Miller (1958), pp.261-297.

policy unsuitable.

Miller's famous paper on "Debt and Taxes" cut us loose from the extreme implications of the original Modigliani-Miller Theory (M-M Theory), which made interest tax shields so valuable that we could not explain why all firms were not awash in debt²². Miller described an equilibrium of aggregate supply and demand for corporate debt, in which personal income taxes paid by the marginal investor in corporate debt just offset the corporate saving. However, since the equilibrium only determines aggregates, debt policy should not matter for any single tax paying firm. This explanation works only if we assume that all firms face approximately the same marginal tax rate, which is a very restrictive assumption.

In the corrected M-M Theory any tax paying corporation gains by borrowing; the greater the marginal tax rate, the greater the gain. In Miller's Theory, the personal income taxes on interest payments would exactly offset the corporate interest tax shield, provided that the firm pays the full statutory tax rate. However, any firm paying a lower rate would see a net loss to corporate borrowing and a net gain to lending.

According to the Static Trade-off Hypothesis, a firm's optimal debt ratio is usually viewed as determined by a trade-off of the costs and benefits of borrowings, holding the firm's assets and investment plans constant²³. The firm is portrayed as

²²M.H.Miller (1977), pp.261-297.

²³S.C. Myers (1977), p.577.

balancing the value of interest tax shields against various costs of bankruptcy or financial embarrassment. Of course, there is controversy about how valuable the tax shields are, and which, if any, of the costs of financial embarrassment are material, but these disagreements give only variations on a theme. The firm is supposed to substitute debt for equity, or equity for debt, until the value of the firm is maximized.

According to the Pecking Order Theory, debt is preferred to equity as it is less risky²⁴. Of course, debt should be default-risk free. As the amount of debt increases the costs of financial distress i.e., legal and administrative costs of bankruptcy as well as monitoring and contracting costs and agency costs increase.

Under Indian conditions where enterprises are family controlled, equity may not be looked upon favourably due to risks associated with loss or dilution of control. Also, the firms may be reluctant to issue new common stock because of the risk of diluting the equity earnings accruing to the existing shareholders. However, firms may wish to maintain a stable proportion of debt in their capital structure to enable "trading on the equity", thus, increasing the per share earnings of the existing shareholders.

The theories of capital structure as discussed in the earlier paragraphs are based on firm level analysis. However, the firm-level financing decision will have important

²⁴S.C.Myers (1984), pp.577-581.

implications for aggregated pattern of financing. Individual corporate efforts at optimal solutions must add up to optimal financing at the macro level²⁵.

Empirical Studies in India:

The empirical studies on corporate finance in India are very limited in number. The few relevant studies have been briefly summarised below.

The first important study on private corporate sector financing was done by Bagchi²⁶. The study was based on the RBI company finance data and covered the period 1950-60. Analysing the pattern of financing he concluded that supply of finance from external sources did not appear to have reduced gross fixed investment seriously; when profit failed to expand, as much as gross investment, external sources made up for the shortfall in internal savings. He further concluded that profit and internal savings were not an important limitation on the supply of finance; the major reason why past profit influenced gross investment was that it was taken by businessmen as an index of the future rate of profit. In connection with his size-wise analysis, Bagchi spoke of a kinked supply curve for external finance; for a particular size-group of firms, the supply of finance remained constant at the rate of interest normally applicable to loans given to them, but only up to a certain limit; then the rate of interest charged increased steeply. With the rise in size of firms (in terms of paid-up-capital) the

²⁵Braj Kishor (1981), pp.3 & 8.

²⁶A.K.Bagchi (1962), pp.153-177.

supply curve of external finance shifted downwards and the kink moved rightwards. He visualised the kink as a recurrent deterrent to investment for the smaller firms but not for the bigger ones. Rosen in his earlier study had pointed out that the larger firms could mobilise funds from banks, deposits from public or through debenture/stock issues whereas these alternatives were far less open to small firms²⁷.

Pandey²⁸ analysed the effects of financial policy variables on growth of firms of six individual industries and came to the conclusion that the main source of financing growth in Indian industries was long-term borrowings against the mortgage of fixed assets. Unsecured loans and debentures were also used for financing growth. External source of financing was a dominant factor for positive growth of firms.

Divatia and Shankar in their paper discussed the role of internal and external sources of funds and their components in financing capital formation of the private corporate sector²⁹. The study was based on the RBI company finance studies relating to medium and large public and private limited companies and covered the period 1961-76. They also discussed the trends and patterns of financing for four individual industries viz., cotton textiles, jute textiles, sugar and cement. The study was, in a way, first of its kind, analysing the pattern of financing over the period. But they offered no explanation for the changing

²⁷G.Rosen (1962), pp.40-49.

²⁸D.P. Pandey (1977).

²⁹V.V.Divatia and K.Shankar (1979).

pattern of finance.

Adve had some interesting findings in his article "Financial Practices in Indian Corporate Sector", based on the RBI company finance data³⁰. He underlined the rising dependence on borrowed capital in relation to the total capital employed in the Indian corporate sector. Trade credit was pointed out to be important source of capital when the bank credit was squeezed. Making an industry-wise analysis, the author came to the conclusion that the industries with large profit margins and those with large depreciation and development rebate reserves had a relatively lower order of overall indebtedness and many of them also had a lower order of bank borrowings in relation to overall indebtedness. Industries with high profit margin such as silk and rayon textiles, aluminium, basic industrial chemicals and medicine and pharmaceutical preparations had lower proportion of borrowed funds as compared to the average of the medium and large public limited companies.

Rao in his article on "Structure of Corporate Finance" made a descriptive analysis of the changing pattern of financing of the private corporate sector through the seventies³¹. He analysed the pros and cons of different sources of funds and discussed some of the policy issues like the impact of corporate taxation, regulation of interest rates on debentures, convertibility clause with the financial institutions, etc. It was emphasised that industrial expansion must rely on raising

³⁰S.Adve (1980).

³¹D.C.Rao (1980).

more capital from the market, particularly through equity and debentures.

Braj Kishor in his book, Corporate Capitalization in India, analysed the trends and patterns of financing of the private corporate sector over the period 1951-74³². He used the RBI company finance data and analysed the patterns of financing of the broad group of industries, i.e., agriculture and allied activities, mining and quarrying, processing and manufacturing (3-categories) and 'others' as well as for the aggregate corporate sector. He analysed the trends of financing through different plan periods. However, the study suffers from two limitations. The blocking of data of different sample series of the RBI so as to make plan-wise analysis of pattern of financing is questionable because of changing size of the sample. Similarly, the analysis of financing for the broad categories of industry-groups would not indicate to any industry-specific financing patterns.

The study on "Resource Mobilisation in the Private Corporate Sector" by Lall, Madhur and Atri under the auspices of NIPFP is unique in nature³³. They not only used the RBI company studies relating to medium and large public limited companies but also compiled a sample data of 99 large public limited companies covering the period 1961-76. The analysis of their sample was made for five industry-groups viz., chemicals, engineering, textiles, food products, and miscellaneous industries. They

³²Braj Kishor (1981).

³³Vinay D.Lall et al. (1982).

traced the trends and patterns of financing of the private corporate sector and offered an economic interpretation of the changes in the structural pattern of resource mobilisation. Their findings can be briefly summarised as follows:

(i) The size-wise analysis indicated that the proportion of corporate savings in gross resources mobilised was much higher in the case of larger companies.

(ii) Age-wise analysis indicated that the new companies mobilised a larger proportion of their resources in the nature of long-term funds than the older companies. Depreciation was a relatively more important component for older companies. Development rebate was a more important constituent for the newer companies.

(iii) Companies with a higher rate of growth of gross fixed assets mobilised a larger proportion of the gross resources in the form of long-term funds mostly constituting institutional finance.

(iv) Companies with lower effective tax liability had a larger internal plough-back and were, therefore, less dependent on external funds.

(v) During the recessionary periods, corporate savings became less important and mobilisation of resources from the stock market was also reduced. During the period of rising prices, the proportion of corporate savings in gross resources seemed to increase.

(vi) Contrary to the common notion, location of the industry did not influence the pattern of financing.

(vii) The econometric exercise to identify the factors for the corporate capital structure (ratio of equity to debt finance) indicated that monetary policy variables such as, the cost and availability of credit had no impact. However, corporate tax rate had a positive impact on debt finance. Equity finance seemed to be influenced by growth of industrial production.

(viii) The econometric exercise relating to the ratio of retention to fresh issues pointed out that increase in personal income tax tended to raise the ratio whereas increase in yield on ordinary shares tended to decrease it.

The study covered the period 1961-76, but the trends in resource mobilisation up to 1978-79 was discussed in a latter section. Use of regression analysis (OLS) for a small number of observation (15 years) is a lacuna of the study.

So far corporate savings is concerned, two major studies have been done in India. Rao and Vivekananda in their study used RBI company finance data over the period 1951-75³⁴. Taking the clue from Lintner's dividend model they estimated alternative saving functions for the corporate sector in India. The variables considered were profit after tax, dividends, depreciation, sales, various alternative proxies for asset expansion as well as liquidity. The results indicated that profit after tax was the most important determinant of corporate savings. In addition, savings was positively related to investment demand and liquidity requirements. However, in comparison to net income these variables appeared to have relatively lesser impact.

Braj Kishor, in a paper, made extensive survey of literature on internal finance and profit retention³⁵. Following Dobrovolsky, he analysed the determinants of corporate savings behaviour in India such as net income (profit after tax), dividend requirements and expansion requirements. Using the RBI company finance data for the period 1951-74, he estimated the relationship by ordinary least square regression. Based on the finding, he concluded that retention and lagged dividends were inversely related. Net income and expansion needs were positively related to retained profit.

In the sphere of external finance, the two studies by

³⁴V.G.Rao and M.Vivekanananda (1980), pp.39-50.

³⁵Braj Kishor (1980), pp.185-207.

Krishnamurty and Sastry are pioneering³⁶. They for the first time discussed the issues of investment and financing in a detailed manner. The first study was a cross-section analysis of the behaviour of investment, dividends and external financing for chemical industries covering the period 1962-67. The behaviour of net flow of debt was explained in terms of gross retained earnings, fixed and investment and lagged debt (stock) through OLS. Fixed investment expenditures significantly influenced the demand for external finance. The flow of internal savings was found to be inversely related to demand for external funds.

The second study was more comprehensive; consisting of a cross-section part (based on a sample of firms relating to seven industries) and a time series part (based on the RBI company finance data). Their objective was to establish relationship between investment, dividends and external financing. They developed three equations for the three variables and estimated the equations both through OLS and 2SLS. They reported that the results obtained by both methods were very much similar. In the time series section, the equation for external finance was estimated for seven industries i.e., cotton textiles, jute, sugar, paper and paper board, chemicals, engineering and cement. The variables were current year's retained earnings, fixed and inventory investment and outstanding debt of the previous year. The flow of external finance seemed to be influenced by both fixed investment and inventory investment in cotton textiles, chemicals, engineering, and cement. The impact of fixed investment was larger in cotton textiles, engineering

³⁶K.Krishnamurty and D.U.Sastry (1971) and (1975).

and cement, while the impact of inventory investment was relatively greater in chemicals. Inventory investment alone was important in jute and sugar, while fixed investment alone was important in paper and paper board.

Venkatachalam and Sarma brought out some interesting relationships of the financial behaviour of the private corporate sector in India in their econometric study³⁷. They used the RBI company finance data over the period 1961-76 and through OLS estimated equations for various sources and uses of funds. The long-term borrowings were positively related to growth of investment and negatively related to generation of internal funds. Short-term bank borrowings were influenced by inventory holdings, liquidity position and the cost of alternative sources (bazar bill rate). However, the borrowings related to outstanding amounts as at the end of the year rather than the flow during the year.

Rao in a study covering the period 1970-85 analysed the demand for bank credit for four industries/industry-groups, as well as for the total manufacturing sector³⁸. He observed that bank credit was related to output level rather than level of inventory. The relative interest rate (ratio of interest on bank borrowings and on debentures) and prices of output also explained the demand for bank credit in his study. The study was based on outstanding level of bank credits and might not bring out the relevant factors unless an analysis of flow of bank credit was

³⁷ T.R.Venkatchalam and Y.S.R. Sharma (1978), pp.69-87.

³⁸ K.S.R.Rao (1988).

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attempted. The OLS estimate for the small sample may not also provide very realistic estimates.

From the above review it becomes clear that financing is a relatively neglected area of scrutiny and analysis in India. The developments in the recent period have not been adequately captured by the studies. In the present study, a modest effort will therefore, be made to fill in certain gaps in the existing literature on corporate finance in India.

Scope and Objectives of the Study

The main objective of the study is to trace the trends in the pattern of financing of the private corporate sector in India both at the aggregate as well as industry/industry-group levels through the period 1961-62 to 1985-86. The movements of the internal and external sources of funds are studied and then the composition of the two mutually exclusive sources are analysed to find out if there are ostensible shifts in favour of or against one or more sources. A firm size-group analysis so as to find out differences in financing among them constitutes another objective of the study. Since private corporate sector constitutes an important segment of the aggregate economy, an analysis of the impact of macro economic variables and interest structures upon the aggregate corporate financing behaviour is also made. The study of the behaviour of retained profits and borrowings of the private corporate sector constitutes yet another objective of the study, they being the main components of internal and external finance, respectively.

Schemata of the Study

The schematization of the study is as per the following sequence. The broad trend and patterns of financing at the aggregate level will be discussed in Chapter II. The disaggregated analysis for individual industries/industry-groups as well as for firm size-groups is done in Chapter III. Chapter IV will be devoted to an examination of the role of macro-economic variables in shaping the pattern of corporate financing. In Chapter V and VI, attempts are made to find out the determinants of corporate savings and borrowings respectively. Finally, Chapter VII discusses the broad findings and draws some general conclusions of the study. The data source, concepts and methodology used in the study are presented in the form of an appendix.

Chapter II

TRENDS AND PATTERNS OF FINANCING - AN AGGREGATE ANALYSIS

This chapter analyses the trends and pattern of financing of private corporate sector in India at the aggregate level over the period 1961-62 to 1985-86. First, the flow of funds accounts of the country is examined in Section I. This is followed in Section II by a detailed analysis of the Reserve Bank of India (RBI) company finance data. Section III is devoted to the analysis of the use of funds for capital formation in the private corporate sector.

Section I : Flow of Funds Accounts

Financial Deficit

A glance at the flow-of-funds accounts of India will show that the private corporate business¹ has been the deficit sector, whose investments exceed on a net basis, its internal financial resources. Similarly, the Government has been another major deficit sector. These and other deficit sectors borrow from the surplus sectors either by creating primary issues or from the financial intermediaries through secondary issues. Table 2.1 depicts the trends on financial balances of different sectors of India from 1961-62 to 1985-86. It shows that the deficit of the private corporate sector, which averaged 1.6 per cent of Gross Domestic Product (GDP) at market prices (current) during 1961-62

¹ It includes non-government non-financial companies and co-operative non-credit societies.

to 1965-66, declined to 1.1 per cent during 1966-67 to 1970-71. Then gradually it increased and reached on an average 2.4 per cent of GDP during 1981-82 to 1985-86. As expected, households remained the major surplus sector all through and its

Table 2.1

Financial Balances in the Flow-of-Funds Accounts of India
(Financial Surplus/Deficit)

(Rs. crores)

| Items | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|--|------------------|------------------|-------------------|-------------------|-------------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| (i) Banking | +271 (0.27) | +302 (0.18) | +1022 (0.35) | +1949 (0.39) | +525 (0.05) |
| (ii) Other Financial Institutions | +9 (Negl) | -3 (Negl) | +36 (0.01) | +584 (0.12) | +2996 (0.31) |
| (iii) Private Corporate Business | -1597 (-1.60) | -1814 (-1.06) | -3399 (-1.15) | -9146 (-1.02) | -23104 (-2.39) |
| (iv) Government | -4426 (-4.43) | -6998 (-4.11) | -12723 (-4.32) | -32165 (-6.40) | -85967 (-8.91) |
| (v) Rest of the World | +2031 (2.03) | +2909 (1.71) | +545 (0.19) | -1646 (-0.33) | +15304 (1.59) |
| (vi) Households | +3307 (3.31) | +4722 (2.77) | +13332 (4.53) | +32707 (6.51) | +72395 (7.50) |
| (vii) Sectors not elsewhere classified | -405 (-0.40) | -802 (-0.52) | -1187 (-0.52) | -7715 (-1.53) | -17771 (-1.84) |

+ = Surplus, - = Deficit Negl. = Negligible

The figures are net figures, i.e., Uses (Lendings) minus Sources (Borrowings).

Figures in brackets represent financial surplus or deficit as percentage of GDP at market prices (old series data)

Source: RBI Monthly Bulletins and Reports on Currency and Finance, Reserve Bank of India, Bombay.

surplus as a percentage of GDP increased on an average from 3.3 per cent during 1961-62 to 1965-66 to 7.5 per cent during 1981-82 to 1985-86. During the seventies banking was an important surplus sector, whereas other financial institutions emerged as a significant surplus sector during the eighties.

Sources of Financing

Table 2.2 presents data on financial deficit of the private corporate business sector and its financing by different sources and instruments. During the sixties the banking sector was the major source of financing the deficit in the private corporate sector, but its importance declined in the seventies. However, it regained its importance in the eighties. Another interesting trend was the emergence of the households sector as a leading lender during seventies, accounting for more than 36 per cent of the deficit of private corporate sector as compared to 15.6 per cent during the sixties. During 1981-86 the share, however, came down to less than 27 per cent; the fall was compensated by the relative rise of other financial institutions.

Financing Instruments

Instrument-wise, loans and advances were the major sources for meeting the deficit of the private corporate business sector. They met on an average 80 to 85 per cent of the deficit during the sixties. Their share declined sharply to 58 per cent during 1971-76 and further to 48 per cent during 1976-81, but rose to 56 per cent during 1981-86. Securities, the other important instrument, met around 29 per cent of the deficit during 1961-66 but its share declined to 19 per cent during

Table 2.2

Financing of Private Corporate Business Sector
(Flow-of-Funds Accounts of India)

(Rs. crores)

| Items | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|---|------------------|------------------|------------------|------------------|-------------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| 1. Financial Sources | 1735 | 2079 | 4929 | 12173 | 32462 |
| 2. Financial Uses | 138 | 265 | 1530 | 3027 | 9358 |
| 3. Financial Balance (Deficit: 1-2) | 1597 | 1814 | 3399 | 9146 | 23104 |
| <u>Financing of Deficit by Sectors:</u> | | | | | |
| (i) Banking | 813 (50.87) | 1006 (55.46) | 1284 (37.78) | 1908 (20.86) | 7527 (32.58) |
| (ii) Other financial Institutions | 354 (22.10) | 361 (19.98) | 522 (15.36) | 1751 (19.14) | 5961 (25.80) |
| (iii) Governments | 115 (7.21) | 127 (7.00) | 244 (7.18) | 529 (5.70) | 652 (2.82) |
| (iv) Rest of the World | 62 (3.86) | 50 (2.76) | -107 (-3.15) | -54 (-0.59) | 111 (0.48) |
| (v) Households | 253 (15.85) | 280 (15.44) | 1273 (37.45) | 3287 (35.93) | 6134 (26.55) |
| (vi) Unidentified | - (-) | -10 (-0.55) | 103 (5.38) | 1724 (18.85) | 2719 (11.77) |
| (vii) Total Deficit | 1597 (100.00) | 1814 (100.00) | 3399 (100.00) | 9146 (100.00) | 23104 (100.00) |
| <u>Financing of Deficit by Instruments:</u> | | | | | |
| (i) Currency and Deposits | -60 (-3.76) | -92 (-5.07) | -465 (-13.68) | -479 (-5.24) | -1959 (-8.48) |
| (ii) Securities | 457 (28.62) | 351 (19.35) | 421 (12.39) | 1428 (15.61) | 5121 (22.16) |
| (iii) Loans and Advances | 1298 (80.83) | 1552 (85.56) | 1966 (57.84) | 4405 (48.16) | 12906 (55.86) |
| (iv) Trade Credit/ Debt | -90 (-5.64) | -41 (-2.26) | 717 (21.09) | 1070 (11.70) | 1255 (5.43) |
| (v) Unclassified | - (-) | 44 (2.43) | 760 (22.36) | 2721 (29.75) | 5781 (25.02) |
| (vii) Total Deficit | 1597 (100.00) | 1814 (100.00) | 3399 (100.00) | 9146 (100.00) | 23104 (100.00) |

Figures in brackets represent percentages to total.

Source: Same as Table 2.1

1966-71 and further to 12 per cent during 1971-76. However, it started rising thereafter, and accounted for 22.2 per cent during 1981-86.

The above analysis of flow-of-funds points out that internal generation of funds in the private corporate sector has not been adequate enough to finance its activities. Therefore, it has had to rely increasingly upon external sources. Source-wise, banking sector, households and other financial institutions were the main lenders to the private corporate sector. Instrument-wise, loans and advances contributed a major share followed by securities and trade credit/debt. Thus, the analysis of flow of funds accounts has provided us with a rough sketch of the patterns of financing of the private corporate sector in India. However, the use of financial flow accounts has a serious limitation; non-availability of the requisite data in the required form does not permit a sufficiently detailed breakdown of borrowing and lending operations of all significant sectors². For a detailed analysis, therefore, we use the RBI company finance studies in the ensuing section.

Section II : RBI Company Finance Data

The flow of funds from internal as well as external sources during the years 1961-62 to 1985-86 relating to medium and large public limited companies covered by RBI company studies are presented in Table 2.3. Internal sources comprises of profit retention, depreciation and capitalised reserves. External

²RBI Bulletin, March 1967, p.247.

sources comprises of capital raised by the issue of shares, and borrowings from the financial institutions and trade credit. The incremental funds raised through different sources as proportions of total sources of funds blocked for each five year series are set out in the table.

Flows of Funds from Internal Sources

The data on company finance also presents a picture broadly similar to the results of the flow of fund analysis. The internal sources accounted for 49.2 per cent on an average of total sources of funds during 1961-71, improved its share to 52.0 per cent during 1971-76, but declined sharply to 41.5 per cent during 1976-1981 and further to 35.1 per cent during 1981-86.

The fluctuation in the relative share of internal sources could be accounted for by the changes in the relative importance of provisions, which constituted the major source of the additional generation of internal funds in most of the years during 1961-86.

Under the head provisions, depreciation provision accounted for the bulk of total funds and the shares of others, like taxation provision (net of advance income-tax) , other current and non-current provisions were negligible during most of the years³.

³Gupta has criticised the inclusion of provisions for taxation and other current and non-current liabilities by the RBI company studies under internal sources. He opines that provisions for taxation and other outstanding dues be treated as external sources. Refer to L.C. Gupta (1969), pp.24-25.

Table 2.3

Sources of Funds for Medium and Large Public Limited Companies
(Percentage to total sources)

| Sources of finance | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|---|---------------|---------------|---------------|---------------|---------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| I. Internal Sources | 49.08 | 49.26 | 51.98 | 41.45 | 35.08* |
| 1. Paid-up-capital | 1.95 | 7.64 | 4.30 | 4.74 | 1.95 |
| 2. Reserves & surplus | 15.20 | 8.16 | 13.57 | 10.95 | 10.16 |
| a) Investment allowance reserve | 6.84 | 5.36 | 4.23 | 2.64 | 2.07 |
| b) Others | 8.25 | 2.74 | 8.75 | 8.75 | 8.82 |
| 3. Provisions | 31.93 | 33.47 | 34.12 | 25.76 | 22.97 |
| a) Depreciation | 30.52 | 32.74 | 26.83 | 23.64 | 21.36 |
| b) Taxation\$ | 1.17 | -0.42 | 3.29 | 1.05 | 0.43 |
| II. External Sources | 50.92 | 50.74 | 48.02 | 58.55 | 64.92 |
| 4. Net Issues | 7.56 | 4.81 | 1.69 | 1.52 | 1.71 |
| 5. Total Borrowings | 28.45 | 27.25 | 20.17 | 27.40 | 37.42 |
| a) From banks | 18.83 | 16.86 | 13.05 | 11.91 | 11.82 |
| b) From other financial Institutions | 1.01 | 2.26 | 0.17 | 6.46 | 8.06@ |
| c) From others | 8.61 | 8.13 | 6.94 | 9.03 | 17.54 |
| 6. Trade dues and other current liabilities | 14.88 | 18.30 | 25.98 | 29.02 | 24.57 |
| (a) Sundry Creditors * | | 14.83 | 17.39 | 19.50 | 14.17 |
| (b) Others * | | 3.48 | 8.59 | 9.53 | 10.40 |
| III. Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

\$ Net of advance income tax @ Include 0.5% from foreign financial sources * = Not Available

Source: Financial Statistics of Joint Stock Companies of India 1960-61 to 1970-71 and 1970-71 to 1974-75, RBI and various issues of RBI Monthly Bulletins. Data for 1981-82 to 1985-86 obtained from RBI.

The share of depreciation in total sources of funds witnessed a secular decline: it fell from 30.0 per cent during 1961-71 to 26.8 per cent in 1971-76, 23.6 per cent in 1976-81 and further to 21.4 per cent in 1981-86. This is the major factor accounting for the decline in the share of internal sources after mid-seventies.

The question arises as to why has the share of depreciation in total sources of funds declined? As such, depreciation is a statutory deduction allowable under the Income-Tax Act for the purpose of replacement of wornout machinery and equipments. A look at the data on uses of funds on machinery and equipment (table 2.4) would indicate that depreciation provision as a percentage of expenditure on machinery and equipments also followed the same trend as that of the share of depreciation in the total sources of funds⁴. It increased from 75 per cent during 1961-66 to 84 per cent during 1966-71 and then declined to reach the level of 54 per cent during 1981-86. Probably, the conventional practice of allowing depreciation at historical costs might have led to this situation. Or else, the newly installed machinery and equipment of advanced technology might be subject to less of wear and tear.

Table 2.4

Depreciation as a Source of Funds

(Rs.lakhs)

| Period | Depreciation provision | Total Internal Sources | Expenditure on Plant & Machinery | Col (2) as a % of Col. (3) | Col. (2) as a % of Col. (4) |
|---------|------------------------|------------------------|----------------------------------|----------------------------|-----------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1961-66 | 57743 | 92847 | 77321 | 62.2 | 74.7 |
| 1966-71 | 97679 | 146968 | 116463 | 66.5 | 83.9 |
| 1971-76 | 161892 | 312165 | 211726 | 51.6 | 76.1 |
| 1976-81 | 235812 | 413422 | 349362 | 57.0 | 67.5 |
| 1981-86 | 524739 | 961575 | 975986 | 60.9 | 53.8 |

Source: Same as Table 2.3

⁴Depreciation should be related to the stock of fixed capital. However, this ratio is worked out to look at the correspondence between sources and uses of funds.

Other major sources of internal finance were (1) capitalised reserves through bonus issues (paid-up-capital) and (2) reserves and surplus. Strictly speaking, it would not be proper to take bonus shares as a separate component of fresh resources generated, as it represents only a book entry transfer from reserves (made up of internal plough-back of earlier years) to share capital. However, by showing it separately, we get an idea of the extent of capitalisation of reserves⁵. Table 2.5 gives information about bonus issues, capitalised reserves and reserves & surplus over the 25 years period. The quick succession of bonus issues since mid-sixties and continuous capitalisation of reserves sharply reduced the magnitude of reserves. In 1966-67 and 1967-68, capitalisation accounted for 15.7 per cent and 8 per cent, respectively of the total sources, whereas, the shares of reserves were -0.8 per cent and 3.6 per cent, respectively. The level of reserves was thus influenced by issue of bonus shares.

The issue of bonus shares was governed by taxation policies of the government in the sixties. A tax on bonus issue was imposed on the companies as well as on the shareholders in 1964 and was subsequently withdrawn in 1966. The low capitalisation in 1964-65 (0.22 per cent of total sources of funds) and high capitalisation in 1966-67 (15.7 per cent) observed in the corporate sector could thus be explained in terms of changes in the fiscal policies of the government. From 1966 onwards, the government policies did not deter companies from issuing bonus shares as these pertained to regulating the frequency and quantum of bonus issues under specific guidelines.

⁵Vinay D Lall, et al, (1982), p.32.

Table 2.5

**Bonus Issues and Reserves and Surplus
(RBI Sample of Medium and Large Public Limited Companies)
(Rs. lakhs)**

| Year | Bonus Issues | | Capitalised Reserves | | Reserves and Surplus | |
|---------|------------------|--------|----------------------|--------------------|----------------------|--------------------|
| | No. of companies | Amount | Amount | % to total sources | Amount | % to total sources |
| 1961-62 | - | 674 | 671 | 2.84 | 5287 | 16.89 |
| 1962-63 | - | 1343 | 1328 | 3.83 | 4516 | 13.89 |
| 1963-64 | - | 787 | 691 | 1.85 | 6295 | 16.84 |
| 1964-65 | - | 262 | 91 | 0.22 | 6787 | 16.37 |
| 1965-66 | - | 929 | 921 | 2.14 | 5861 | 13.63 |
| 1966-67 | 247 | 9857 | 9869 | 15.66 | -498 | -0.79 |
| 1967-68 | 163 | 4197 | 4318 | 7.94 | 1971 | 3.63 |
| 1968-69 | 88 | 1627 | 1721 | 3.42 | 5079 | 18.18 |
| 1969-70 | 102 | 3234 | 3366 | 5.56 | 8141 | 13.45 |
| 1970-71 | 81 | 3588 | 3517 | 5.81 | 9638 | 13.73 |
| 1971-72 | 58 | 2887 | 2886 | 3.58 | 13256 | 16.54 |
| 1972-73 | 62 | 3591 | 3548 | 4.89 | 12463 | 17.28 |
| 1973-74 | 86 | 4646 | 4657 | 3.71 | 18634 | 14.85 |
| 1974-75 | 124 | 8113 | 8261 | 4.28 | 38421 | 15.77 |
| 1975-76 | 81 | 5938 | 6578 | 5.87 | 6684 | 5.16 |
| 1976-77 | 106 | 8898 | 9934 | 8.98 | 538 | 0.48 |
| 1977-78 | 115 | 18595 | 18563 | 7.78 | 4638 | 3.38 |
| 1978-79 | 189 | 8694 | 8828 | 4.96 | 19891 | 11.18 |
| 1979-80 | 116 | 7985 | 7955 | 3.18 | 38964 | 15.36 |
| 1980-81 | 99 | 18425 | 18188 | 3.18 | 45288 | 14.21 |
| 1981-82 | 98 | 9278 | 9135 | 2.89 | 51845 | 11.86 |
| 1982-83 | 95 | 11288 | 13382 | 2.71 | 58786 | 18.33 |
| 1983-84 | 61 | 8684 | 9831 | 2.33 | 36638 | 9.47 |
| 1984-85 | 68 | 7891 | 6765 | 1.43 | 42224 | 8.91 |
| 1985-86 | 64 | 8248 | 9672 | 1.45 | 68823 | 18.28 |

- = not available

Source: Various issues of RBI Monthly Bulletins; data on bonus issues 1976-77 onwards, obtained from RBI.

During 1976-78, capitalised reserves also gained prominence with parallel decline in reserves and surplus. During the subsequent period the trend was reversed.

Another source that get influenced by fiscal policies of the government would be development rebate/investment allowance reserve. The tax concession attached to investment allowance provide incentives to the corporate entities to resort

to this source⁶. During the period 1961-71 this source constituted a significant proportion (52%) of total reserves and surplus. However, its importance declined over time and reached a low level of 20.4 per cent of total reserves during 1981-86.

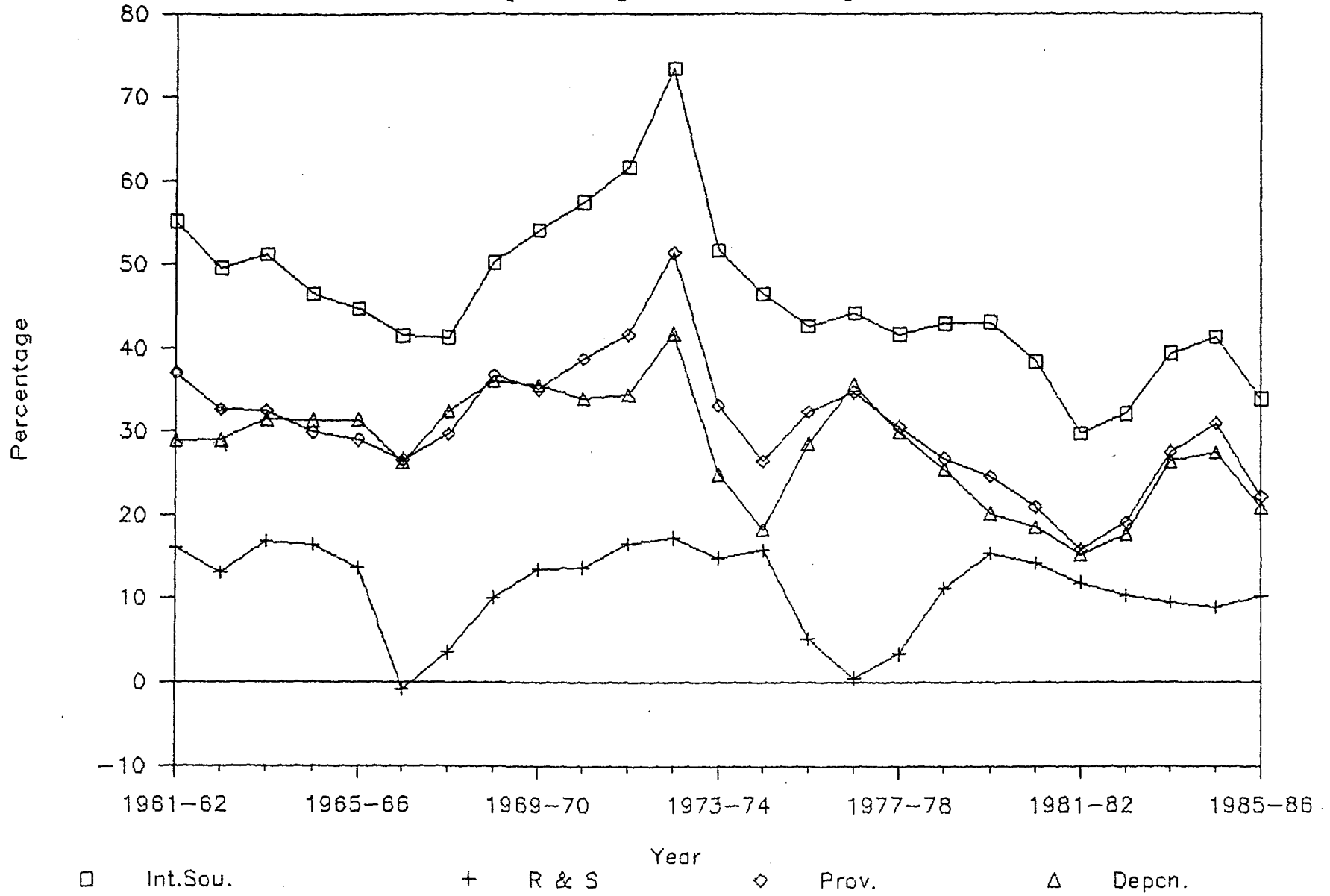
Other reserves and surplus accounted for about 8 to 9 per cent of total sources of funds during most of the periods. An important item included under this head is the 'retained profit' which constitutes the net savings of the corporate sector. It is difficult to separate out the exact amount of profit retention from the sources and uses of funds. However, an empirical analysis of determinants of retained profit based on income and expenditure accounts is done in Chapter V.

Figure-1 shows the trends of the shares of the internal sources and the important components of internal sources (Reserve and Surplus, Provisions and Depreciation Provision) as proportions of total sources over the period 1961-62 to 1985-86.

Overall, the analysis of RBI company finance data, indicated the relative decline in the importance of internal sources in financing the corporate sector. In particular, the seventies and early eighties marked a sharp fall in the share of internal sources. The decline was accounted by the decline in the shares of both (1) provisions and (2) reserves and surplus (including capitalised reserves); but the decline was more pronounced in the case of provisions and in particular the

⁶For details about the rates of deduction allowed under Income Tax Act, refer to K.C.Sharma, (1988), pp.189-192.

Figure 1
Trends in Internal Sources of Funds
 [Percentage to Total Sources]



provision for depreciation. The period of our analysis and especially during the eighties thus, witnessed some basic changes in the pattern of financing of the private corporate sector.

Flow of Funds from External Sources

The relative decline over time in the share of internal sources relatively meant a corresponding increase in the share of external sources in financing the corporate sector activities. Since 1973-74, external sources accounted for an increasing share of the aggregate funds; their share reached as high as of 70.2 per cent in 1981-82; and for the period since then and until 1985-86 accounted on an average 65 per cent of the total funds. More significantly, there was a remarkable change in the composition of external sources. In particular, the share of net issues declined and that of borrowings increased over time. Indeed, at all times except during the seventies, borrowings were the most important components of external sources, though its share in total funds was marked by fluctuations over the period. During 1981-86, the share of borrowings to total source averaged to 37.4 per cent. It appears that the private corporate sector in India has become 'borrowing-oriented'.

Borrowing Orientation

This is not to suggest that, we have reached the stage of a corporate debt crisis⁷ in India. Yet a trend towards 'borrowing-orientation' is clearly discernible. This phenomenon is reflected in different ratios presented in Table 2.6. The

⁷In the USA a lot of discussion is taking place currently on eventuality of a debt crisis. Refer to B.S. Bernarke and John Y.Campbell, (1988).

ratio of total borrowings to total resources raised during a year, showed a tendency to increase from early seventies to mid-eighties. However, the borrowings as reported in sources and uses of funds statement are net of repayment of debt and a significant increase of repayment in any year may affect the ratio seriously. The sharp decline in the ratio during late sixties and early seventies may be attributed to this factor. Another parameter to be considered is the ratio of debt equity. There was a secular increase in the ratio of debt to equity from 1962-63 (17.2) to 1983-84, when it reached 83.1. In the subsequent two years, it declined to 79.8 and 74.3, respectively. During the sixties the ratio ranged between 17 and 35, whereas during the seventies between 38 and 51. During the eighties the ratio increased very sharply and averaged 81.2 during 1983-85.

The general upward shift in the ratio of debt to equity since 1974-75 seems to have resulted from a combination of factors operating in the economy, particularly the industrial sector - the more important of these being inflation pushing up project cost, shift towards capital intensive projects and also projects involving high-level technology, policy changes more favourable to debentures and also the popularity of convertible debentures with the investing public⁸. Allowing interest for income tax deduction and taxing of dividend would have led to a disparity between the two alternative sources of funds. Fear of dilution of control also would have induced the family controlled business houses in India to resort to less of equity finance. All these factors together would have led to the secular increase

⁸T.K.Velayudham (1984), pp.298-99.

Table 2.6

Borrowing Orientation of Medium and Large Public Limited Companies

| Year | Increase in Borrowing as % of total sources of finance | Ratio of debt [†] to equity [‡] | Total Borrowing as % of total liabilities | Interest as % of total value of production | Interest as % of gross profit | Interest as % of total borrowing |
|---------|--|---|---|--|-------------------------------|----------------------------------|
| 1961-62 | 28.6 | 17.6 | 28.7 | 1.6 | 15.9 | 5.5 |
| 1962-63 | 26.4 | 17.2 | 29.4 | 1.7 | 16.1 | 5.6 |
| 1963-64 | 26.9 | 18.3 | 30.1 | 1.8 | 16.9 | 6.0 |
| 1964-65 | 30.4 | 18.7 | 31.3 | 2.0 | 19.6 | 6.6 |
| 1965-66 | 35.5 | 19.7 | 33.0 | 2.3 | 23.4 | 7.0 |
| 1966-67 | 36.7 | 33.3 | 36.6 | 2.8 | 27.0 | 7.2 |
| 1967-68 | 38.3 | 34.5 | 38.0 | 3.1 | 33.9 | 7.7 |
| 1968-69 | 24.4 | 35.3 | 38.0 | 3.1 | 35.5 | 7.9 |
| 1969-70 | 18.5 | 33.8 | 37.3 | 2.9 | 30.3 | 7.8 |
| 1970-71 | 19.8 | 31.5 | 36.8 | 2.9 | 30.8 | 8.3 |
| 1971-72 | 15.5 | 42.0 | 37.1 | 3.2 | 32.1 | 9.1 |
| 1972-73 | 1.7 | 41.7 | 35.3 | 3.1 | 31.8 | 9.5 |
| 1973-74 | 17.1 | 41.1 | 34.6 | 2.9 | 27.3 | 9.2 |
| 1974-75 | 22.3 | 37.8 | 32.7 | 3.1 | 26.8 | 10.9 |
| 1975-76 | 33.3 | 40.8 | 33.8 | 3.9 | 38.4 | 12.2 |
| 1976-77 | 27.0 | 46.8 | 35.4 | 3.7 | 39.9 | 12.7 |
| 1977-78 | 26.7 | 48.7 | 35.3 | 3.7 | 39.7 | 12.8 |
| 1978-79 | 25.5 | 48.0 | 34.9 | 3.4 | 35.6 | 12.2 |
| 1979-80 | 27.2 | 51.1 | 34.8 | 3.4 | 32.8 | 12.3 |
| 1980-81 | 29.1 | 57.1 | 34.8 | 3.7 | 37.5 | 13.1 |
| 1981-82 | 37.1 | 70.6 | 36.5 | 3.9 | 42.3 | 13.3 |
| 1982-83 | 38.3 | 80.6 | 37.5 | 4.5 | 50.9 | 13.5 |
| 1983-84 | 40.3 | 83.1 | 38.2 | 4.7 | 58.5 | 13.2 |
| 1984-85 | 32.8 | 79.8 | 37.8 | 4.6 | 56.2 | 13.1 |
| 1985-86 | 38.6 | 74.3 | 37.2 | 4.7 | 54.0 | 12.8 |

† Debt comprises (1) all borrowings from government and semi-government, financial institutions other than banks and other institutional agencies, (2) borrowings from banks against own debentures and other mortgages and (3) 'other borrowings' against own debentures other mortgages, deferred payment liabilities and public and other deposits.

‡ Equity comprises paid-up capital (ordinary, preference, deferred etc. shares), forfeited shares and all reserves.

Source: Same as Table 2.3

of debt-equity ratio.

The ratio of borrowing to total assets did not show any significant trend over the period. Throughout sixties it increased slowly and then declined till the mid-seventies. Thereafter, it started rising slowly and averaged 37 during 1981-86. However, throughout the period 1961-86, the ratio ranged between 29 to 38. Thus, growth in the borrowings has been matched by growth in assets, leaving debt-asset ratios essentially unchanged.

If we look at the ratio of interest to value of production we observe a clear upward trend ; it has increased gradually from 1.6 in 1961-62 to 2.9 in 1970-71, 3.7 in 1980-81 and 4.7 in 1985-86. The growth in borrowings thus significantly outstripped earnings' growth, leading to increased interest burdens. Interest as percentage of gross profit increased sharply during seventies and more so during the eighties. It increased from 15.9 per cent in 1961-62 to 35.5 per cent in 1968-69 and further to 39.9 per cent in 1976-77 . Though the ratio declined marginally in the subsequent three years, it rose sharply during the eighties and averaged 55 per cent during 1982-86. Thus, the private corporate sector is paying more than half of its profits before tax towards fixed interest commitments during the recent years. This may be due to increased magnitude of borrowings as well as increase in cost of borrowings (interest as per cent of total borrowings).

It is thus clear (going by the trend of all the ratios) that the private corporate sector in India has become increasingly borrowings oriented, particularly during the late seventies and eighties. Interest commitment is increasing year after year and has reached more than 50 per cent of its gross profits. It is time for the corporate sector to assess the viability of increasing the debt for financing its activities. If more debt is used it may lead to financial risk and the fixed interest may swallow an increasing proportion of the gross profit which may land it in a "corporate debt trap"⁹.

If all the debt on the books as at the end of 1985-86 were called off and no further debt was resorted to until the existing debt are redeemed, then it will take more than 25 years at the current rate of accumulation of retained profits to repay all the debts. Since debt of such long duration is not available, this volume of debt can be repaid either by recourse to fresh debt, or by disbursements of funds which should be the legitimate claim of depreciation.

It is instructive to note that some other studies have also voiced concern about the increasing trend of borrowings. Using the ICICI company finance data over the period 1977-78 to 1987-88, Raja and Prashar have portrayed a gloomy picture about the level of debt of the organised corporate sector¹⁰. The High Level Working Group on capital market (Chairman: Abid Hussain)

⁹Similar to "Internal debt trap" and "External debt trap" as discussed in current economic literature.

¹⁰D.S.Raja and M.Prashar (1989).

has also urged for a shift on the part of private companies from greater reliance on debt by way of debentures and public deposits to equity.

The question arises as to whether there is any norms for debt levels. At the aggregate level, some standard tests are prescribed i.e, (1) absolute levels of debt, (2) debt to equity ratio, (3) interest plus debt repayments to disposable income and (4) total debt as a percentage of GNP¹¹. However, ratios of debt to income in the aggregate may conceal extreme situations among segments of the whole. Large debt increases may be concentrated among small or growing firms. Thus evaluation of over all debt levels must take into account distribution of debt, total assets, liquid assets and net worth¹².

The norms for debt level are more strategic for individual firms. The conventional prescription of debt-equity ratio (2:1) seems to have outlived its utility and some additional norms like ratio of debt to net assets, ratio of interest payment to profit before tax, pay out period (retained profit/stock of total debt) or earning coverage criterion (net earning before tax as a ratio of interest + sinking fund discounted for tax rate) may be prescribed¹³.

¹¹J.F.Weston (1954), p.124.

¹²Ibid, p.125.

¹³G.Donaldson (1961), p.159.

Composition of Borrowings

Bank borrowings

Another interesting aspect is that the composition of borrowing itself has also undergone changes during the period of our study. Of the total borrowings, bank supplied a larger proportion of borrowings to the total funds in sixties and the seventies (except 1972-73). During the eighties, the banks' share in total funds raised declined to less than 12 per cent, despite the high borrowing position of the private corporate sector. Thus, the bank borrowings is becoming less and less significant as source of corporate finance.

The decline in banking sector's lending to the corporate sector needs further examination. After nationalisation of commercial banks in 1969 and reordering of priorities in the use of bank funds, an increasingly larger proportion of resources of commercial banks has been channelised to other uses such as for meeting increased reserve requirements and credit to priority sectors. (During 1950's and 1960's out of every Rs.100 of additional bank deposits, the private corporate sector received around Rs.50. Under the current dispensation it can receive no more than Rs.10. As a result, the share of medium and large industry in total outstanding bank credit has declined sharply from 60.6 per cent in March 1968 to 38.4 per cent in March 1983 and further to 30.4 per cent in June 1986¹⁴. The progressive reduction in corporate sector's dependence on banks is a healthy trend. This is in terms of Tondon Committee norms for working

¹⁴Report on Currency and Finance, RBI (1987-88), p.153.

capital finance as discussed in subsequent paragraphs¹⁵.

Broadly, it can be said that the working capital requirements, to the extent they are borrowed, are met by the commercial banks, though there are other sources like public deposits and trade credit. Also, the insistence by commercial banks on the maintenance by borrowers of a favourable current ratio of more than unity implies a part of working capital is required to be met through long-term borrowings¹⁶. The commercial banks also grant term loans, but mainly medium-term loans of less than seven year's duration; of late they have been encouraged to grant more of long term-loans. The main contributory factor to this new role is the existence of wide opportunities opened for banking industry. A shift in the pattern of deposits of commercial banks in favour of higher maturities has also helped this tendency. A decade ago, the major portion of the liabilities of banks consisted of demand liabilities. But now, term liabilities represent the bulk. Introduction of the refinance scheme of the IDBI has further encouraged them to venture into long-term commitments. Simultaneously with these developments, there has been a change in the concept of liquidity of bank funds. As term lending institutional agencies, commercial banks have assisted industrial enterprises by granting term loans, subscribing to shares and debentures of corporate enterprises and under-writing security

¹⁵The study group to frame guidelines for follow up of bank credit constituted by the RBI in 1974-75 is known as Tondon Committee.

¹⁶Current ratio refers to the ratio of current assets to current liabilities. The Tondon committee suggested the current ratio ranging from 1.17 to 1.79.

issues of these companies¹⁷.

In the sources and uses of statements of RBI company finance studies, the term component of bank borrowing is not separately stated excepting during the period 1966-67 to 1970-71 (it is mentioned as 'that portion included under debt'). However, we will make an effort to estimate the term loans component in banks borrowings from the balance sheet data. In the balance sheets, the term components of bank credit is indicated separately in parentheses. The difference in the consecutive years' term components of bank borrowings in the balance sheets will give us the approximate figures of term loan components for the years 1972-86. The figures are set out in Table 2.7. Since they are estimated from the balance sheets, they may only portray the approximate position. It may be seen that up to mid-seventies term loans did not figure as a major portion of incremental bank borrowings. From 1976-77, the high phase of term loans started excepting for the year 1980-81 when it was 8.1 per cent of total bank borrowings. Its share had gone up to 44.2 per cent in 1982-83 and further to 53.7 per cent in 1983-84. In the subsequent two years, however, the share of term loans in total incremental bank borrowings declined to 18.2 per cent and 12.7 per cent, respectively. Thus, gradually commercial banks have come to supply term loans to the private corporate sector for their fixed capital formation.

¹⁷G.Prasad (1987), pp.116-117.

Table 2.7

Bank Borrowings by Medium and Large Public Limited Companies

(Rs. Lakhs)

| Year | Bank Borrowings raised during the year | Term Components of bank borrowings‡ | Col (3) as % of col.(2) | Inventories as % of Sales | Short-term bank borrowings as % of inventories‡ |
|---------|--|-------------------------------------|-------------------------|---------------------------|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1961-62 | 5257 | - | - | 33.1 | 48.8 |
| 1962-63 | 6648 | - | - | 2.9 | 51.9 |
| 1963-64 | 3762 | - | - | 31.6 | 51.9 |
| 1964-65 | 8289 | - | - | 31.7 | 54.6 |
| 1965-66 | 11761 | - | - | 32.5 | 57.7 |
| 1966-67 | 13026 | 61 | Negl. | 33.9 | 57.7 |
| 1967-68 | 13146 | 250 | 1.9 | 34.5 | 60.0 |
| 1968-69 | 5803 | 958 | 16.5 | 32.5 | 61.4 |
| 1969-70 | 7378 | 229 | 3.1 | 31.5 | 60.8 |
| 1970-71 | 10933 | -48 | 0 | 31.6 | 58.8 |
| 1971-72 | 7758 | 342 | 4.4 | 32.3 | 53.8 |
| 1972-73 | -4936 | -47 | 0 | 30.8 | 49.1 |
| 1973-74 | 15369 | 1164 | 7.6 | 32.6 | 47.1 |
| 1974-75 | 33809 | -710 | 0 | 33.1 | 45.5 |
| 1975-76 | 26356 | -1280 | 0 | 31.1 | 49.5 |
| 1976-77 | 17133 | 2820 | 16.5 | 27.4 | 52.4 |
| 1977-78 | 18123 | 2704 | 14.9 | 26.6 | 52.8 |
| 1978-79 | 38994 | 4204 | 13.9 | 27.5 | 51.0 |
| 1979-80 | 32482 | 8879 | 27.3 | 28.5 | 46.8 |
| 1980-81 | 20877 | 1619 | 8.1 | 27.7 | 43.9 |
| 1981-82 | 57896 | 12913 | 22.6 | 27.1 | 41.8 |
| 1982-83 | 44383 | 19601 | 44.2 | 27.9 | 39.8 |
| 1983-84 | 48790 | 26194 | 53.7 | 26.1 | 41.8 |
| 1984-85 | 49765 | 9856 | 18.2 | 24.8 | 43.1 |
| 1985-86 | 90294 | 11436 | 12.7 | 25.5 | 44.2 |

- = Not Available, Negl. = Negligible

‡ Estimated from the combined balance sheet for the years 1971-72 to 1985-86.

‡ The ratio of the period 1961-62 to 1965-66 is of bank total borrowings to inventories.

‡ The numerator or both numerator and denominator are negative

Source: Same as Table 2.3

The reasons for the decline in the share of bank borrowings in the total sources of funds raised during a year and increasing proportion of bank borrowings constituting term loans may be explained in terms of Tondon Committee recommendations. The two main recommendations of the committee were relating to: (i) inventory norms and (ii) bank financing of inventory. The committee felt that the levels of inventory maintained by the industries were of high level and recommended different inventory norms for different categories of industries¹⁸. The committee also prescribed that at least 25 per cent of the current assets of a firm to be raised from internal sources or through long term debts¹⁹.

It can be seen from the Table 2.7 that the ratio of inventories to sales was high (more than 30 per cent) during the sixties and the trend continued till 1975-76. This trend, got reversed thereafter, with gradual implementation of the Tondon Committee inventory norms and reached 25.5 per cent in 1985-86.

As regards the role of bank credit in financing inventories, it was observed that in 1966-67 the ratio of short-term bank borrowings to inventories was as high as 57.7 per cent. The ratio came down to 45.5 per cent in 1974-75 probably on account of a more rigorous scrutiny of loan proposals under the credit authorisation scheme by the RBI. With the adoption by banks of the measures recommended by the Tondon Committee, the proportion of short term bank borrowings to inventories came down from 49.5

¹⁸ Tondon Committee Report (1975), pp.18-26.

¹⁹ Ibid., p.27.

in 1975-76 to 39.8 in 1982-83; during the period 1983-86, this proportion ranged between 42 to 44 per cent. Borker has estimated the reduction in the level of bank credit to the private corporate sector due to the Tondon Committee norms to nearly 20 per cent²⁰.

Financial Institutions

The other important sources of borrowings are the financial institutions. They have become competitor to commercial banks so far corporate finance is concerned, particularly in recent years²¹. The financial institutions emerged as a significant source of company finance for the private sector since mid-seventies. The prominence of the financial institutions may be attributed to relatively lower rates of interest charged by them. They on an average charge 2 to 4 per cent less than the commercial banks. Further, borrowings from public sector lending institutions has certain merits in as much as thereby the investment projects are required to go through some rigorous scrutiny and social priority²².

Foreign Source

Data are available separately in respect of foreign financial institutions since 1981-82 only. They accounted for less than one per cent of total resources raised during most of the years and in 1985-86 their share was negative. This indi-

²⁰D.G.Borkar (1989).

²¹"The term Financing Institutions.... see that the long-term funds are adequate to provide for a margin for working capital purposes". Tondon Committee Report, p.31.

²²Rangarajan Committee Report, p.30.

cates relatively lower dependence of private corporate sector on foreign sources. There is a view that India's private corporate sector can raise funds in foreign markets to its benefits²³. It is estimated that rest of the world can meet around 15 per cent (Rs.21,818 crores) of the finance required for investment in the private corporate manufacturing sector during the Eighth Five Year Plan²⁴.

Debentures and Public Deposits

In recent years, two sources of funds covered under 'other borrowings' have become very significant for the private corporate sector. They are debentures and public deposits. While both are debt capital, the former is mostly used to raise long term funds, and the latter for meeting working capital requirements. Public deposits have been a traditional source of finance for the private corporate sector in India but they have come into prominence since mid-seventies. As per the existing stipulation, the non-banking non-financial companies can raise deposits up to 25 per cent and 15 per cent of paid-up-capital and free reserves from the public and director and shareholders, respectively. As per the recommendations of the Study Group on Non-Banking Companies, RBI (1975), the maximum duration of public deposits should not exceed three years and that they should be

²³Sir William Ryrie in his inaugural lecture on "Investment, Entrepreneurship and Growth: The Role of Private Sector in Development" organised by the Harvard Business School Association of India in January, 1989 stated that India had some strong well managed companies which could raise capital by issuing debentures convertibles or even straight forward stocks in New York or London or elsewhere. - Quoted in Economic Times, 24th January, 1989.

²⁴Eighth Plan - Perspectives, Federation of Indian Chambers of Commerce and Industry, New Delhi (1989) p.8.

resorted only to meet the short-term working capital requirements of non-financial companies.

During the second half of 1960s, public deposits constituted 2.3 per cent of total sources of the medium and large public limited companies. Their share increased to 4.8 per cent during the seventies and constituted 4.5 per cent of total sources during 1981-86.

Table 2.8

**Public Deposits and Debentures as Sources of Finance for
Medium and Large Public Limited Companies**

(Rs. Lakhs)

| Years | Public Deposits | | Debentures | | Col.(3) + |
|--------------------|-----------------|-------------------------------|------------|-------------------------------|--------------|
| | Amount | As a % of total Sources | Amount | As a % of total Sources | |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1966-67 to 1970-71 | 6931 | 2.32 | - | - | - |
| 1971-72 to 1975-76 | 24603 | 4.10 | - | - | - |
| 1976-77 to 1980-81 | 52537 | 5.27 | - | - | - |
| 1981-82 | 24714 | 5.65 | 12617 | 2.89 | 8.54 |
| 1982-83 | 30122 | 6.13 | 26309 | 5.35 | 11.48 |
| 1983-84 | 21327 | 5.51 | 39919 | 10.32 | 15.83 |
| 1984-85 | 13297 | 2.81 | 58717 | 10.71 | 13.52 |
| 1985-86 | 20870 | 3.13 | 77031 | 11.55 | 14.68 |
| 1981-82 to 1985-86 | 110338 | 4.49 | 206593 | 8.41 | 12.90 |

- = Not available

Source: Data obtained from RBI.

The increasing reliance of the private corporate sector on public deposit is mainly due to the fact that it is the cheapest source of finance. Even at the maximum rate of 14 per

cent per annum²⁵, public deposit is cheaper than the borrowings from the banks or mopping up funds by means of debentures or shares. Further, in case of deposits, there are no documentation formalities or creation of security. Above all, payment of interest on deposits is an admissible business expenditure²⁶. The depositors also like to invest their savings in company deposits because of attractive rates of interests, shorter maturity and convenience in withdrawal of deposits. However, public deposit as a financial asset suffers from certain adverse features; it is more risky, less liquid and not favoured by tax laws²⁷.

In the Law, fixed deposits are unsecured loans and in the event of a company going into liquidation, deposit holders rank very low in the order of priority of repayment of debt. The most important reason as to why people still choose to invest in this asset lies in that there is a substantial amount of yield difference between these deposits and their substitutes particularly, bank deposits. Companies' demand for public deposits has to be explained in terms of the cost of funds, availability of alternative sources of funds, and convenience in

²⁵This is the present ceiling rate of interest. Until 1981-82, there was no ceiling on interest rates to be paid on public deposits. Thereafter, RBI has been fixing up the ceiling rates from time to time.

²⁶The Income Tax Authorities allow only 85 per cent of interest paid on deposits as admissible expenditure.

²⁷Interest income received by the depositor from a non-banking company is not eligible for tax concession. From the company's point of view also 15 per cent of interest paid on deposits is not allowed as deductible expense for tax purposes. Thus tax provisions may have the effect of raising the relative effective cost of borrowings for companies and of reducing the effective rate of return to depositors.

raising capital²⁸.

Debenture is another frequently used method by the private corporate sector for procuring long-term funds. Data are not available regarding debentures for the earlier period. However, it is a known fact that during the eighties the role of debentures in financing of corporate sector has become very significant. In 1981-82 this accounted for 2.9 per cent of the total sources of the medium and large public limited companies and its share steadily increased to 11.6 per cent in 1983-84. During the five year period 1981-86, its share came to be more than 8 per cent of total sources. The characteristics of debenture are very similar to public deposits excepting for the fact that the debentures issued to public are secured and sometimes convertible. Again, servicing of debt is fully tax deductible in contrast to public deposits on which 15 per cent of the interest paid is not tax deductible. However, both the sources contributed significantly to the total sources of the medium and large industries during the eighties and during 1981-86 their combined share was more than 14 per cent.

²⁸L.M.Bhole (1982), pp. 293-295.

From the point of view of the companies, debentures are a very attractive means of raising long term finance²⁹. The raising of debenture capital does not dilute control, unlike shares and unlike borrowings from term lending institutions with a mandatory convertibility clause. That is why debenture is a popular source of finance for the private corporate sector in India. It may be mentioned that the primary capital market in India is booming with some "big/mega" issues of convertible debentures towards the last part of 1989. Convertible debenture is beneficial to the issuing companies as well as to the investors. The companies need not pay dividend during the initial period when the project is under construction and pay the fixed rate of interest to the holders which is deductible towards income tax purpose. After a time span the project starts paying and the conversion of debentures helps in widening the equity base of the companies. Similarly, the investors get assured rate of interest during the initial period and share in the profit and prosperity of the companies after conversion in terms of dividends and capital gains.

However, funds raised through debentures remain borrowed funds, therefore, the liability of the companies to pay interest and repay the principal amount when due, increases with increasing amount of such borrowings. Excessive debt endangers

²⁹The revised guidelines by the Controller of Capital Issues (CCI) relating to debentures in the eighties enhanced the purposes for their issuance, permitted companies to retain a certain portion of over subscribed amounts and also kept the option of converting non-convertible debentures and non convertible part of partly convertible debentures open with the approval of CCI. The hike in rate of interest charged to debentures also helped in making it a lucrative security to the investors.

the very existence of a company in times of recession - that it can not be serviced in the absence of cash generation.

Trade Credit

Trade credit is the major source of short-term finance, apart from bank credit, available to business enterprises. It is extensively used for tackling seasonal and temporary fluctuations in business activity. Extension of trade credit involves a short postponement of payment after delivery by the supplier and is also termed as "suppliers credit"³⁰. The movements in trade credit are significant since the borrowing units can reduce the impact of restrictive credit policies by increasing their resource to trade credit. When bank credit is restricted, the borrowers may attempt to improve their liquidity by increasing their volume of purchases on credit terms and stretching their trade creditors. Trade credit is generally used, and particularly by small firms, when bank credit is not available or when there are difficulties in providing adequate and acceptable security³¹.

We see from Table 2.9 that trade dues and other current liabilities as a percentage of total sources of funds for the medium and large scale industries has increased steadily from 14.9 per cent during 1961-66 to 29.0 per cent in 1980-81. Though the share has declined to 24.6 per cent during 1981-86, still it meets a significant proportion of financial requirements. Sundry creditors as a percentage of total sources also increased from

³⁰Braj Kishor (1981) p.149.

³¹V.M.Sundar Raj (1982), p.160.

Table 2.9

Role of Trade Credit in Financing of Medium and Large Public Limited Companies

(Rs. Lakhs)

| Items | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|---|---------------|---------------|---------------|---------------|---------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| 1. Trade dues of other Current Liabilities | 28144 | 54618 | 156023 | 289484 | 683398 |
| of which: | | | | | |
| (a) Sundry Creditors | - | 44240 | 104454 | 194481 | 348048 |
| (b) Others | - | 10369 | 51569 | 95003 | 255350 |
| 2. (a) as a % of (1) | - | 81.81 | 66.95 | 67.18 | 57.68 |
| 3. (1) as a % of Total Sources | 14.88 | 18.30 | 25.98 | 29.82 | 24.57 |
| 4. (1) as a % of External Sources | 29.22 | 36.87 | 54.11 | 49.57 | 37.84 |
| 5. (a) as a % of Total Sources | - | 14.83 | 17.39 | 19.58 | 14.17 |
| 6. (a) as a % of External sources | - | 29.22 | 36.23 | 33.30 | 21.83 |
| 7. (1) as a % of loans and advances and other debt balances | 88.78 | 95.76 | 148.88 | 139.11 | 112.58 |
| 8. (a) as a % of Sundry Debtors | - | 189.79 | 157.68 | 141.84 | 99.19 |
| 9. Sundry debtors as a % of sales | - | 1.46 | 1.84 | 1.78 | 2.05 |

- = Not available; All the figures relate to statements on Sources and Uses of Funds excepting sales which relates to statements on income and expenditure

Source: Same as Table 2.3

14.8 per cent during 1966-71 to 19.5 per cent in 1976-81 but declined to 14.2 percent during 1981-86.

It may be mentioned here that trade credit figures in both sources as well as uses of funds. Trade credit received and trade credit given arise out of different activities. Trade credit received originates from purchases of raw material, stores etc., and serves as a source of finance while trade credit

provided is essentially a method to facilitate sales³². Sundry creditors are a source of trade credit whereas through sundry debtors trade credit is provided to others. Thus, the net trade credit as indicated by the ratio of sundry creditors to sundry debtors would show the net inflow to or outflow from the corporate sector through this channel.

Trade dues and current liabilities as a percentage of loans and advances and other debt balances increased from 88.7 per cent during 1961-66 to 148.8 per cent during 1971-76. Though the ratio has fallen subsequently, still it has been more than 100 per cent indicating to net inflow of trade credit. Similarly, sundry creditors as a percentage of sundry debtors has been over 100 per cent during the period 1966-81 indicating to net flow of resources to the corporate sector. During 1981-86, they break even. Sundry debtors as appearing in uses of funds accounted 1.5 per cent of sales during 1966-71 and the ratio increased to 2.1 per cent during 1981-86 indicating more emphasis on sales promotion through trade credit.

The growth in the use of trade credit as a source of finance by itself need not cause undue concern. In the developed countries, trade credit is the most important source of short term finance. As our economy advances, the use of trade credit would also therefore increase. But if increasing resort to trade credit is for compensating the shortfalls in bank credit and tends to reduce the impact of restrictive credit policies, the trends in trade credit may have to be watched closely. The

³²Ibid., p. 163.

increasing net flow of funds through trade credit to the corporate sector has to be realised in the context of the parallel or "black" markets and unorganised markets in money and credit existing in the country³³.

Figure-2 depicts the trends in share of external sources and its important constituents (Total Borrowings, Bank Borrowings, and Trade Dues and Other Current Liabilities) as percentages of total sources of funds.

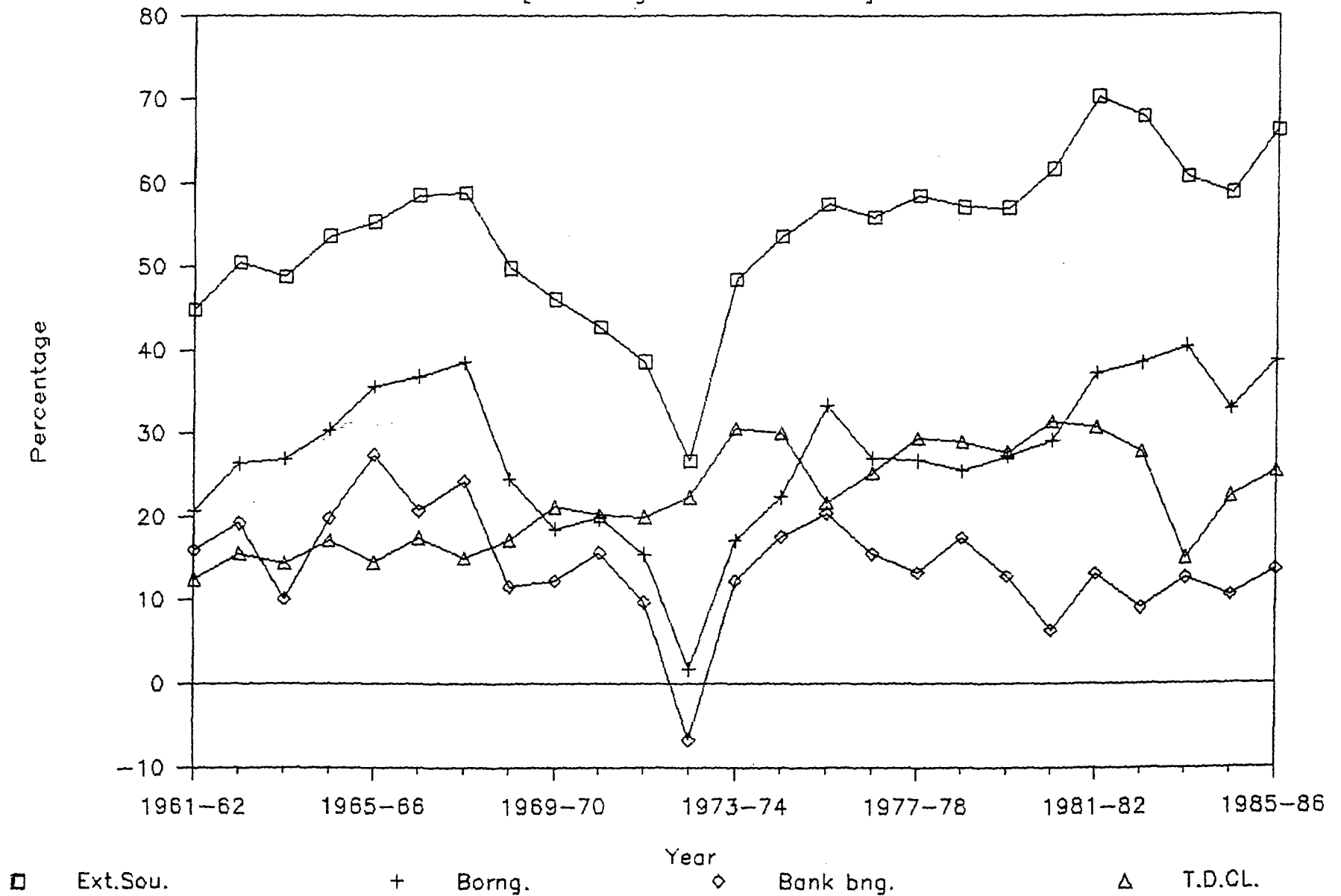
Last but not the least, external source of finance is equity capital (new issues); in fact it figures first in the sources of fund statement. Equity capital, also known as risk capital, enables the industrial enterprises to provide for and protect against the numerous uncertainties which are inherent in business environment. However, resources mobilised through new issues of equity capital as a percentage of total resources of the medium and large scale industries has declined substantially over time. In 1961-62 the share was 11.6 per cent which declined to 5.3 in 1965-66, thus contributing on an average 7.6 per cent of the total sources during 1961-66. During 1966-67, the share went down to 5.1 per cent. During the decade 1971-81, the share depleted to less than 2 per cent, though it increased marginally to 2.6 per cent during 1981-86. The above analysis indicates to the declining importance of new issues as a source of finance for the private corporate sector.

The reasons for the declining importance of new issues are complex. Probably, the enlarging of the equity base through

³³ Ibid., pp.161-171.

Figure 2
Trends in External Sources of Funds

[Percentage to Total Sources]



new issues is not resorted to due to the fear of dilution of control by monopoly house. Further, the deductibility of interest from taxable income provides an incentive to go in for borrowing rather than equity finance. However, an inadequate equity base would restrict the capacity of a firm to borrow as the permissible level of borrowings is related to the level of equity. Besides, there are some advantages in resorting to equity finance as a firm could either reduce the rate of return or skip dividend all together in times of financial difficulties.

Preference shares which accounted for 4 to 9 percent of total capital raised in the capital market in early sixties became prominent during 1965-75 when their share ranged between 12 to 17 percent (excepting in 1972-73 when it stood at 6.9 per cent). Since mid-seventies the share of preference shares showed a declining trend and during 1981-86 it has been virtually wiped out as a source of finance. The preference shares in India have not been able to satisfy the investor's expectations namely regularity of income or safety of capital. As regards regularity of income, preference shares do not compare with bonds or debentures at all; because preference dividends have been skipped too often and by too many companies. The frequent non-payment of preference dividends affects both income and capital values of these securities, and their marketability³⁴.

Besides ordinary and preference shares, resources are also raised in the capital market in the form of debentures. It

³⁴M.Moshin and K.M.Ahmad (1980), pp. 117-18.

may be observed that debentures have steadily emerged as a major instrument of raising resources in the capital market especially during the eighties. In 1985-86 debentures accounted for 93.2 per cent of resources raised from the capital market virtually wiping out equity as a source of finance.

Table 2.10(a)

Capital Raised and Debentures Issued During the Year (New Issues)
(Rs.lakhs)

| Year | Ordinary - Shares | | | | Preference - Shares | | | |
|---------|-------------------|--------|------------|--------------|---------------------|--------|------------|--------------|
| | No. of Comps. | Amount | % to Total | Av.per Comp. | No. of Comps. | Amount | % to Total | Av.per Comp. |
| 1961-62 | - | 3167 | 79.85 | - | - | 273 | 6.80 | - |
| 1962-63 | - | 2458 | 81.82 | - | - | 185 | 3.50 | - |
| 1963-64 | - | 2388 | 69.80 | - | - | 247 | 7.14 | - |
| 1964-65 | - | 1718 | 52.93 | - | - | 300 | 9.49 | - |
| 1965-66 | - | 1628 | 42.60 | - | - | 475 | 12.43 | - |
| 1966-67 | 157 | 2989 | 58.58 | 12.80 | 44 | 625 | 15.74 | 14.28 |
| 1967-68 | 144 | 1881 | 37.78 | 13.86 | 43 | 861 | 17.26 | 20.02 |
| 1968-69 | 118 | 3164 | 58.82 | 29.76 | 38 | 874 | 14.04 | 23.00 |
| 1969-70 | 95 | 2281 | 47.86 | 23.17 | 39 | 791 | 17.28 | 20.28 |
| 1970-71 | 181 | 1328 | 48.88 | 13.15 | 27 | 378 | 13.91 | 14.00 |
| 1971-72 | 118 | 1879 | 32.63 | 15.92 | 35 | 696 | 12.89 | 19.89 |
| 1972-73 | 185 | 1538 | 38.26 | 14.57 | 21 | 274 | 6.85 | 13.05 |
| 1973-74 | 99 | 1489 | 68.33 | 14.23 | 22 | 285 | 13.82 | 12.95 |
| 1974-75 | 122 | 2122 | 81.27 | 17.39 | 23 | 303 | 14.67 | 16.65 |
| 1975-76 | 52 | 2876 | 64.83 | 39.92 | 11 | 265 | 8.17 | 24.69 |
| 1976-77 | 126 | 2465 | 59.79 | 19.56 | 19 | 396 | 9.68 | 20.84 |
| 1977-78 | 185 | 2681 | 64.64 | 24.77 | 5 | 74 | 1.84 | 14.88 |
| 1978-79 | 111 | 2991 | 58.01 | 26.95 | 12 | 269 | 5.22 | 22.42 |
| 1979-80 | 118 | 3065 | 44.13 | 27.86 | 18 | 495 | 7.13 | 27.58 |
| 1980-81 | 181 | 2871 | 38.79 | 28.43 | 15 | 482 | 5.43 | 26.88 |
| 1981-82 | 133 | 7882 | 35.36 | 53.25 | 16 | 329 | 1.64 | 28.56 |
| 1982-83 | 115 | 4417 | 14.04 | 38.41 | 16 | 745 | 2.37 | 46.56 |
| 1983-84 | 114 | 4746 | 18.58 | 41.63 | 9 | 288 | 8.46 | 23.11 |
| 1984-85 | 99 | 3999 | 7.28 | 40.39 | 5 | 184 | 8.34 | 36.88 |
| 1985-86 | 188 | 5422 | 6.56 | 58.28 | 18 | 172 | 8.21 | 17.28 |

- = Not available.

Source: Same as Table 2.3. Data for the period 1975-76 to 1985-86 obtained from RBI.

Table 2.10(b)

Capital Raised and Debentures Issued During the Year (New Issues)
(Rs. lakhs)

| Year | Debentures | | | | Total | | |
|---------|---------------|--------|------------|---------------|---------------|--------|---------------|
| | No. of Comps. | Amount | % to Total | Av. per Comp. | No. of Comps. | Amount | Av. per Comp. |
| 1961-62 | - | 526 | 13.26 | - | - | 3966 | - |
| 1962-63 | - | 437 | 14.55 | - | - | 3804 | - |
| 1963-64 | - | 822 | 23.78 | - | - | 3457 | - |
| 1964-65 | - | 1238 | 38.14 | - | - | 3246 | - |
| 1965-66 | - | 1719 | 44.98 | - | - | 3822 | - |
| 1966-67 | 24 | 1338 | 33.69 | 39.72 | 199 | 3972 | 19.96 |
| 1967-68 | 24 | 2248 | 45.86 | 49.89 | 180 | 4989 | 27.72 |
| 1968-69 | 21 | 2188 | 35.14 | 62.26 | 144 | 6226 | 43.24 |
| 1969-70 | 9 | 1687 | 34.94 | 45.99 | 126 | 4599 | 36.58 |
| 1970-71 | 9 | 1812 | 37.25 | 27.17 | 119 | 2717 | 22.83 |
| 1971-72 | 16 | 3184 | 55.29 | 57.59 | 139 | 5759 | 41.43 |
| 1972-73 | 13 | 2194 | 54.86 | 39.99 | 122 | 3999 | 32.78 |
| 1973-74 | 8 | 369 | 17.90 | 28.62 | 114 | 2862 | 18.87 |
| 1974-75 | 2 | 186 | 4.86 | 26.11 | 130 | 2611 | 28.88 |
| 1975-76 | 5 | 988 | 27.76 | 32.42 | 62 | 3242 | 52.29 |
| 1976-77 | 18 | 1262 | 38.61 | 41.23 | 146 | 4123 | 28.24 |
| 1977-78 | 9 | 1349 | 33.52 | 48.24 | 115 | 4824 | 34.99 |
| 1978-79 | 14 | 1496 | 29.01 | 51.56 | 132 | 5156 | 39.86 |
| 1979-80 | 26 | 3385 | 48.74 | 69.45 | 139 | 6945 | 49.96 |
| 1980-81 | 28 | 4129 | 55.78 | 74.82 | 134 | 7482 | 55.24 |
| 1981-82 | 52 | 12617 | 63.80 | 288.27 | 184 | 28827 | 188.84 |
| 1982-83 | 77 | 26389 | 83.68 | 314.71 | 188 | 31471 | 167.48 |
| 1983-84 | 94 | 39919 | 88.96 | 448.73 | 283 | 44873 | 221.85 |
| 1984-85 | 83 | 58717 | 92.38 | 549.88 | 175 | 54988 | 313.71 |
| 1985-86 | 126 | 77031 | 93.23 | 826.25 | 221 | 82625 | 373.87 |

The average amount raised per company through debentures during the eighties has increased very sharply. This indicates that a few companies of financial standing have been able to monopolise this source of finance to their advantages.

Debenture is debt capital and to the extent it is resorted to, the debt and equity mix of the firms get affected. In respect of convertible debentures however, the debt is automatically converted into equity after a specified period. To make detailed analysis we do not have published data

classifying the debentures into convertible and non-convertible types. The data published in RBI annual reports on capital issues by non-government public/private limited companies gives an indication about the convertible portion of the debentures raised by the companies. During 1981-82 and 1982-83 convertible debentures accounted for 77 per cent and 63 per cent, respectively, of total debenture issues. Then the share came down sharply to 5.5 per cent in 1983-84. It accounted for 17.4 per cent and 8 per cent of the total debentures during 1984-85 and 1985-86, respectively³⁵. A caveat may be added. The very low percentages of equity and high percentage of debentures in total capital raised by the medium and large public limited companies in recent years may be due to the bias of RBI sample in favour of existing companies rather than new companies³⁶. Notwithstanding the data limitation, it may be noted that equity finance is becoming relatively insignificant as compared to debt finance in the private corporate sector in India.

Broadly speaking, the foregoing analysis of the RBI data on sources of funds during the period 1961-61 to 1985-86 revealed some basic changes in the pattern of financing. In particular the shift from internal funds generation to external financing and from equity to debt within that external financing have been the major features of structural change taking place in

³⁵As per current indications, convertible debentures account for around 70 per cent of total debentures issues by non-government public limited companies, RBI Annual Report 1987-88, p.54.

³⁶Of the total consents/acknowledgements (CCI) for Rs.3,917 crores of equity issues during 1980 to 1986 (calender years), the new companies accounted for 62 per cent.

Indian corporate sector since mid-seventies.

Section III : Pattern of Uses of Funds for Capital Formation

We have been so far dealing with the relative movements of different sources of finance. It will be rewarding to look at the "Use" side as well. For there is close correspondence between sources of funds and uses of fund and an analysis of the uses of funds for different purposes will provide a deeper insight into the financing of capital formation in the corporate sector.

Category of Asset Formation

Table 2.11 presents in a nutshell the uses of funds for different categories of assets formation by the medium and large public limited companies over the period 1961-86. A glance through the table makes it clear that gross fixed assets constitute the major head of uses of funds followed by inventories. Plant and machinery account for bulk of the fixed assets followed by buildings. The share of land is very marginal. Finished goods and work in progress constitute the main component of inventories followed by raw materials, components etc. The major component of financial asset is in the form of loans and advances and other debtor balances.

Uses of funds for gross fixed asset formation (capital formation) constituted 56.3 per cent of total sources during 1961-66, but declined in importance in subsequent periods. 1981-86, however, witnessed a gradual recovery in the significance of capital formation in the uses of funds. Almost

Table 2.11

Uses of Funds by Medium and Large Public Limited Companies
(Percentages to total)

| Uses of Funds | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|---|---------------|---------------|---------------|---------------|---------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| A. Gross Fixed Assets | 56.33 | 52.25 | 46.79 | 47.88 | 51.99 |
| 1.Land | 1.88 | 0.67 | 0.44 | 0.47 | 0.53 |
| 2.Buildings | 9.83 | 7.48 | 5.47 | 4.98 | 5.75 |
| 3.Plant & Machinery | 40.37 | 39.04 | 35.26 | 35.03 | 39.74 |
| 4.Others | 4.55 | 5.07 | 5.62 | 7.40 | 6.01 |
| B. Inventories | 25.24 | 24.93 | 31.41 | 26.19 | 18.68 |
| 5.Raw Materials etc. | 8.04 | 7.89 | 8.88 | 9.40 | 4.10 |
| 6.Finished Goods & WIP | 11.82 | 13.76 | 16.85 | 11.25 | 11.05 |
| 7.Others | 6.20 | 3.28 | 6.47 | 5.54 | 3.53 |
| C. Loans and Advances and ODBs | 16.77 | 19.12 | 17.46 | 20.86 | 21.82 |
| D. Investments | 1.51 | 1.10 | 0.95 | 1.33 | 3.60 |
| E. Other Assets | 0.15 | -0.43 | 0.03 | 0.98 | -0.23 |
| F. Cash & Bank Balance | 0.00 | 3.03 | 3.36 | 2.84 | 3.93 |
| Total: | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

WIP = Work In Progress, ODB = Other Debtor Balances

Source: Same as Table 2.3

the same trend is observed with respect to plant and machinery which constituted the bulk of gross fixed assets. Interestingly, uses of funds for inventories has declined sharply during 1981-86. On the other hand, uses of funds for financial asset formation has gradually increased over time mostly due to increase in the level of loans and advances and other debtor balances. This has a close correspondence with the observed increase in trade dues and other current liabilities in the sources of funds. An interesting aspect of financial asset formation is the increasing share of investment in the eighties.

Probably, the corporate sector is investing in securities on an increasing scale. This may be either to use the surplus funds available with them or due to a deliberate attempt of investing in profitable companies. Also investment in UTI and Government securities may have been raised to take advantage of the tax benefits.

Degree of Self-finance

Having found that the funds are mostly used for financing physical capital formation, we may attempt to estimate the degree of self-finance of the private corporate sector in India. The term "self-finance" may be defined as that part of a firm's capital formation (acquisition of physical assets and changes in inventories) during a certain period of time which is financed out of its own resources. Two alternative methods may be applied for the estimation. In Method 1, the proportion of total capital formation financed by internal savings is taken as the degree of self-finance, on the assumption that all internally generated funds are used for this purpose³⁷. In the Method 2, the degree of self-finance is obtained by subtracting the percentage of external finance from capital formation, it is assumed that external funds are used entirely to finance capital formation³⁸.

³⁷V.Divatia and Kripa Shankar (1979), p.121.

³⁸This method was used by the Economic Commission in its Economic Survey of Europe 1955 with a few differences. UNO used this method in toto in its publication "Aspects of Finance of Development", ECAFE Growth Series No.4, pp. 49-50.

Table 2.12 presents the estimated degrees of self-finance of private corporate sector in India. In terms of the first method the degree of self-finance went up from 60.2 per cent during 1961-66 to 63.8 per cent during 1966-67 and further to 66.5 per cent during 1971-76. Thereafter, it fell down sharply to 56.0 per cent during 1976-81 and further to 49.6 per cent in 1981-86. As per the second method, the degree of self-finance declined from 30.7 per cent during 1961-66 to 26.4 per cent during 1966-71 but increased to 30.2 per cent during 1971-76. It declined sharply, thereafter, to 15.4 per cent during 1976-81 and 5.8 per cent during 1981-86. Results of both the

Table 2.12

**Degree of Self Finance Medium and Large Public Limited Companies
(Percentages)**

| Items | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|---|---------------|---------------|---------------|---------------|---------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| <u>Total Resources</u> | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| A. Internal Sources | 49.00 | 49.26 | 51.98 | 41.45 | 35.00 |
| B. External Sources | 50.92 | 50.74 | 48.02 | 58.55 | 64.92 |
| <u>Allocation</u> | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| C. Fixed Assets | 56.33 | 52.25 | 46.79 | 47.80 | 51.99 |
| D. Inventories | 25.24 | 24.93 | 31.41 | 26.19 | 18.68 |
| E. Gross capital formation (C+D) | 81.57 | 77.28 | 78.20 | 73.99 | 70.67 |
| F. Financial Asset formation | 18.43 | 22.82 | 21.80 | 26.01 | 29.33 |
| G. Self-finance Method-1 (A as a % of E) | 60.17 | 63.82 | 66.47 | 56.02 | 49.64 |
| H. Self-finance Method-2 (E-B) | 30.65 | 26.44 | 30.18 | 15.44 | 5.75 |
| I. Self financing of fixed assets (A as a % of C) | 87.1 | 94.28 | 110.09 | 86.72 | 67.47 |

Source: Same as Table 2.3

methods indicate the same declining trend in the degree of self-finance though the range of decline differed as between the two methods.

Normally, fixed assets formation is financed, by internal generation of funds and long term borrowings, whereas inventory financing is done through short term sources, of which bank credit is the most important³⁹. We can observe from Table 2.12 that internal sources financed bulk of the fixed asset formation during the sixties and seventies. In fact, between 1971-76 internal finance could not only finance fully the fixed capital formation but also meet to some extent the financing of inventory. Naturally, the short fall would have been financed by external sources (long term borrowings).

As for the financing of inventory accumulation, it is evident from Table 2.13, that short-term bank credit fell short of inventory accumulation throughout the period 1961-86. Net trade credit which was positive during 1971-86, could not also fully meet the gaps. Borrowings from other sources (mostly public deposits and debentures, see Table 2.9) might also have been used to meet the inventory finance gaps. For the periods 1961-66, 1966-71 and 1976-81, these sources generated resources almost equal to the gaps. However, during 1971-76, these sources fell far short of the gap indicating other sources would have been used for the purpose of filling the gap. In contrast during 1981-86 these sources accounted for resources far in excess of inventory gap. This is suggestive of the increasing popularity of

³⁹K.G.K.Subba Rao (1977), p.136.

Table 2.13

Financing of Inventory Accumulation of Medium and Large Public Limited Companies
(Percentages to total uses/sources of funds)

| Years | Inventory Accumulation | Total Borrowing from Banks | Short-term Borrowing from banks | Net Trade Credit* | Col.4 + Col.5 | Col.2 - Col.6 | Borrowings from other sources |
|---------|------------------------|----------------------------|---------------------------------|-------------------|---------------|---------------|-------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1961-66 | 25.24 | 18.83 | - | -1.89 | 16.94 | 8.30 | 8.61 |
| 1966-71 | 24.93 | 16.83 | 16.37 | -8.82 | 15.55 | 9.38 | 8.24 |
| 1971-76 | 31.41 | 13.85 | 13.12 | 8.52 | 21.64 | 9.77 | 5.93 |
| 1976-81 | 26.19 | 11.91 | 9.88 | 8.16 | 18.84 | 8.15 | 7.22 |
| 1981-86 | 18.68 | 11.82 | 8.68 | 2.75 | 11.35 | 7.33 | 17.88 |

- = Not Available

* Net Trade Credit is worked out by netting out loans and advances and other debtor balances from trade dues and other current liabilities.

† Since data for col.(4) is not available, col. (3) is added up.

Column 4 is based on our estimated data as in Table 2.6

Source: Same as Table 2.3

public deposits, debentures and other external sources for financing fixed asset formation. An analysis of the correspondence between external sources of funds (borrowings) and uses of funds for capital formation will be done latter in Chapter VI. Mean while, we may conclude the chapter by underlying the major findings of our analysis of the macro trends and patterns of financing of the private corporate sector.

Summary of Findings

The foregoing analysis of the capital structure of the private corporate sector brought out some characteristic trends and patterns of financing during the period 1961-62 to 1985-86.

These in the main included the following:

1. The flow-of-funds analysis indicated the private corporate business as a deficit sector which, therefore, mobilised its resources from such external sources as the banks, financial institutions and households in the forms of loans and advances, securities and trade credit/debt.

2. The sources of funds of RBI company finance studies pointed out to the followings:

a) The share of internal sources in total sources of funds showed a perceptible decline since mid-seventies with a corresponding increase in the share of external sources.

b) Within internal sources, depreciation constituted the major component, followed by reserves and surplus. The decline in the proportion of internal sources since mid-seventies was due to the declines in the share of both these sources but the decline was more pronounced in case of depreciation.

c) Within external sources, borrowings constituted the major component; particularly during the eighties the "borrowing orientation" of the private corporate sector reached a high level which made the aggregate capital structure imbalanced.

d) Though borrowings from banks was the major constituent of total borrowings, its share in total sources of funds witnessed a secular decline and the other financial institutions emerged as prominent sources since mid-seventies.

e) A remarkable feature was the significant contribution of debentures and public deposits (more than 14 percent) to the total sources of funds during 1981-86.

f) Very significantly, trade dues and other liabilities accounted for a large proportion of total sources during the seventies and eighties.

g) The resources mobilised through equity (new issues) was very nominal during the seventies and the eighties leading to a high debt-equity ratio.

3. The analysis of uses of funds indicated that funds utilised for gross fixed assets declined during the seventies and eighties as compared to the sixties. The share of loans and advances and other debtor balances was higher during 1976-86 as compared to the earlier period. The degrees of self-finance, as measured by various criteria indicated to a declining trend after mid-seventies. Net trade credit and borrowings from 'other' sources (mostly public deposits and debentures) appeared to supplement short-term bank borrowings in financing inventory accumulation.

Chapter III

FINANCING PATTERN - A DISAGGREGATED ANALYSIS

The analysis of trends and patterns of financing of the private corporate sector carried out in the previous chapter related to the corporate sector as a 'whole'. The general trends observed at the aggregate level, however, may not hold good for individual industry-groups. Inter-industry variation in the pattern of financing is likely to arise due to such factors as differences in their capital requirements, the rate of growth, image in the capital market and credit worthiness¹. Similarly, differences may exist in the pattern of financing among different size-group of firms. In the present chapter we may, therefore, attempt to present a disaggregated picture of the pattern of financing of the private corporate sector. This is done at two levels. An industry-wise description is done in Section I, which is followed by an analysis of size-groups of the firms in Section II.

Section I : Industry-Wise Analysis

An examination of sources of funds statements of major industries (See table 3.1) brings out that, by and large, the patterns observed in most individual industry-groups are broadly in line with the aggregate picture. In particular, the declining share of internal sources in the total sources of funds over time

¹V.D. Lall et al. (1982) p.58.

Table - 3.1

Medium and Large Public Limited Companies
Sources of Finance : Industry/ Industry group - wise
(Percentages to Total Sources)

| Industries | 1961-62 to 1965-66 | | | 1966-67 to 1970-71 | | | 1971-72 to 1975-76 | | | 1976-77 to 1980-81 | | | 1981-82 to 1985-86 | | |
|--------------------------|--------------------|-----------------|------------------------|--------------------|-------|-----------|--------------------|-------|-----------|--------------------|-------|-----------|--------------------|-------|-----------|
| | IS ¹ | Bs ² | TD & OCLs ³ | IS | Bs | TD & OCLs | IS | Bs | TD & OCLs | IS | Bs | TD & OCLs | IS | Bs | TD & OCLs |
| 1.Tea Plantations | 61.01 | 23.69 | 12.10 | 46.81 | 17.42 | 30.76 | 57.28 | 19.41 | 23.51 | 34.09 | 43.98 | 17.35 | 79.20 | 15.54 | 4.71 |
| 2.Sugar | 58.28 | 25.84 | 11.47 | 21.38 | 57.71 | 19.83 | 55.38 | -9.26 | 51.69 | 37.02 | -8.54 | 64.50 | 34.84 | 39.05 | 19.11 |
| 3.Tobacco | 74.42 | 8.36 | 17.52 | 38.32 | 43.23 | 12.33 | 23.39 | 45.83 | 26.04 | 38.43 | 15.79 | 53.13 | 36.13 | 23.39 | 39.39 |
| 4.Cotton Textiles | 43.88 | 40.17 | 12.56 | 42.14 | 35.52 | 20.31 | 48.92 | 24.65 | 25.59 | 31.94 | 40.64 | 26.01 | 21.32 | 52.35 | 19.66 |
| 5.Silk & Rayon Textiles | 43.84 | 32.69 | 1.45 | 72.61 | 11.73 | 13.49 | 74.05 | 12.19 | 12.02 | 63.71 | 10.86 | 20.83 | 28.69 | 49.53 | 19.57 |
| 6.Aluminium | 66.20 | 17.70 | 5.14 | 73.88 | 8.86 | 5.16 | 73.35 | 3.45 | 19.02 | 70.56 | -4.97 | 34.71 | 27.59 | 39.23 | 29.31 |
| 7.Engineering | 40.50 | 31.87 | 17.96 | 41.40 | 33.98 | 18.37 | 44.58 | 23.51 | 20.52 | 41.56 | 22.91 | 32.97 | 32.67 | 38.19 | 27.11 |
| 8.Chemicals | 40.78 | 30.43 | 9.72 | 49.93 | 29.73 | 10.47 | 68.04 | 12.49 | 17.11 | 52.69 | 25.00 | 20.53 | 44.45 | 33.02 | 19.51 |
| 9.Cement | 54.14 | 30.72 | 8.71 | 53.41 | 27.29 | 14.86 | 49.71 | 8.31 | 40.39 | 26.16 | 31.41 | 41.81 | 43.38 | 35.82 | 19.71 |
| 10.Rubber & its Products | 49.42 | 18.28 | 11.64 | 51.83 | 26.57 | 18.83 | 42.90 | 20.17 | 34.17 | 45.59 | 14.59 | 39.58 | 31.18 | 28.73 | 38.81 |
| 11.Paper & its Products | 42.24 | 39.99 | 10.65 | 31.82 | -0.31 | 8.67 | 70.66 | 11.57 | 15.32 | 33.46 | 47.94 | 15.70 | 31.07 | 31.41 | 27.91 |
| 12.Trading | 25.13 | 42.85 | 25.34 | 19.72 | 22.85 | 54.85 | 24.13 | 17.63 | 55.64 | 16.27 | 31.26 | 51.80 | 24.00 | 43.70 | 30.71 |
| 13.All Industries | 49.08 | 28.45 | 14.88 | 49.26 | 27.25 | 18.30 | 51.98 | 20.17 | 25.98 | 41.45 | 27.40 | 29.02 | 35.88 | 37.42 | 24.51 |

Note : 1 - Internal Sources; 2 - Borrowings; and 3 - Trade Dues and Other current liabilities.

Source : Same as table 2.3

is observed in major industry-groups excepting tea plantation and trading. In the case of tea plantation, internal sources became very important during 1980's and in the case of trading it remained low throughout the period of our study. Since these two type of activities did not come under manufacturing, we could say that the pattern of financing of the individual industries was broadly the same as for the manufacturing as a whole.

However, some noticeable differences were observed with respect to the degree of dependence on different sources of funds². The specific characteristics of the important industry-groups in this regard are briefly set out.

Sugar: The Sugar industry depicts a pattern that is broadly in conformity with the macro trend marked by the declining importance of internal sources over time. On an average, internal sources, accounted for 37.0 per cent and 34.8 per cent of total sources during the periods 1976-81 and 1981-86 respectively, as compared to 58.3 per cent and 55.4 per cent during 1961-66 and 1971-76 respectively. It must be noted that the bulk of the internal sources was generated through depreciation. As for the external sources, borrowings, which accounted for a substantial share of total sources in the sixties, became less significant in the eighties. Its contribution was negative during the seventies. The share of trade dues and other liabilities, which had soared up during the

²Industry-wise details of sources and uses of funds have been published by RBI in its company finance studies up to 1980-81. The data for the period 1981-82 to 1985-86 are obtained from RBI.

seventies, declined in its importance during the eighties.

Tobacco: The Tobacco industry followed a slightly different financing pattern from the aggregate. The internal sources occupied very prominent place (74%) in first half of the sixties but witnessed a sharp decline during 1966-76. There was, however, a revival during 1976-86. The proportion of borrowings (mostly from banks) was very high during 1966-76 (44.5 per cent) but fell down during 1976-86 (21 per cent). A significant part of resources came through trade dues and other current liabilities during 1976-86 (43.7 per cent).

Cotton Textiles: In the case of Cotton Textiles, the share of internal sources declined very sharply during 1976-86. Probably, the low profitability of the industry during 1981-86 reduced the level of reserves and surplus. Consequently, the "borrowing-orientation" was more pronounced during 1976-86. Trade dues accounted for 26 per cent of the shares during seventies but its share declined to 20 per cent in the eighties.

Silk and Rayon Textiles: Internal sources showed a decline in Silk and Rayon Textiles in conformity with the macro trend. What made the behaviour of this industry-group different from the main stream was the dramatic and sudden decline in share of internal sources in the eighties. As against a share of more than 70 per cent in 1966-81, internal sources got reduced to 28.7 per cent during 1981-86. It must be noted that this industry was a highly profitable activity during the 1960's and 1970's; its financial performance however, deteriorated in the 1980's with the result that no significant contribution was made towards reserves and

surplus. In fact, the entire amount of internal resources had to come from depreciation during 1981-86. The industry had to depend heavily on external sources during the eighties. Among the industry-groups under study, the Silk and Rayon Textiles showed the highest degree of 'borrowing-orientation' in the eighties, next to Cotton Textiles.

Aluminium: The Aluminium industry fitted well with the general pattern of the corporate sector as a whole in the sense that the contribution of internal sources to the total funds declined over-time. During the period 1963-80, internal sources accounted for the bulk of the total sources (more than 70 per cent, of which depreciation alone was around 50 percent) and the contribution of external sources was negative in many years, i.e., 1963-65, 1970-71 and 1976-79. However, the share of internal sources, declined significantly to 27.6 per cent during 1981-86. With the decline in the share of internal sources, the recourse to external sources increased during the eighties. In particular, trade credit and other current liabilities were prominent sources of funds during 1976-86 accounting for 32 per cent of total sources as compared to its 5 per cent share during the sixties and 20 per cent during 1971-76.

Engineering: The Engineering industry-group had almost similar financing pattern as for the corporate sector as a whole. However, trade dues and other current liabilities accounted for higher proportion of total funds (29 percent) as compared to the corporate sector as a whole (26 per cent) during 1971-86. The share of borrowings' in total sources had gone down to 23 per

cent during the seventies as compared to 33 per cent in the sixties but rose sharply during the eighties (38.2 percent).

Chemicals: In the case of Chemicals internal sources accounted for a high percentage of total sources of funds throughout the period of our study. And, in variance with the pattern for the corporate sector as a whole, the proportion of internal sources was much higher during the seventies than the sixties. Its share though declined in the eighties was still much higher than the corporate sector as a whole. In fact, among the industry groups considered, Chemicals was the one which had the highest share of internal sources in total funds. It must be noted that Chemicals was a typically high profit making and fast growing industry. Higher level of profit helped it in maintaining higher level of reserves and surplus and thereby its reliance on internal sources. Naturally, external sources and particularly, trade dues and other current liabilities were relatively less important source of finance for Chemical industry-group as compared to the corporate sector a whole.

Cement: The pattern of financing the Cement industry was slightly different from the macro trend in the sense that the internal sources assumed importance in the eighties after recording a declining trend in the seventies. To illustrate, internal sources, which accounted for more than 50 per cent of total sources during 1961-76, declined to 26.2 per cent during 1976-81, but rose to 43.4 per cent during 1981-86. Probably, the high profitability achieved during 1982-84 helped Cement industry in increasing internal funds in terms of reserves and surplus.

Naturally, external sources and in particular, trade dues and other current liabilities which accounted for a major portion of total sources during 1971-81, registered a decline in share during 1981-86.

Rubber and Rubber Products: In Rubber and Rubber Products internal sources, which accounted for 51 per cent of total sources during the sixties and 45 per cent during the seventies had reduced its share to 31 per cent during 1981-86. This was in conformity with the declining importance of internal sources at the macro level. What made the industry slightly different was that the borrowing-orientation was not prominent as a very significant proportion of total funds (more than 38 per cent) came from trade dues and other current liabilities during 1976-86.

Paper and Paper Products: Finally, the specific characteristics of Paper and Paper Products industry-group were (a) a relatively high share of internal sources between mid-sixties and mid-seventies (b) high reliance on external sources during the early sixties and the eighties. Trade dues and other current liabilities accounted for 28 per cent of total resources during 1981-86 as compared to 15 per cent during the seventies and 9 percent in the sixties.

The objective of this section was to find out whether or not significant difference existed among the individual industry-groups, so far as the capital structure was concerned³.

³A detailed industry-wise analysis of the capital structure has to be more rigorous in nature and is beyond the scope of this study.

The analyses indicated special characteristics in some industry-groups. The specific nature of the industry-groups, their profitability etc., could explain the observed differences in the financing pattern among different industry-groups. To recapitulate, such industries as sugar, tobacco and rubber and rubber products, were the ones in which raw material supply would have taken place on credit terms. This explained why their capital structure was loaded with trade dues and current liabilities. Chemicals industry was one example of a fast growing industry with high profitability. As a result it could generate higher proportion of internal resources. In case of such capital intensive industries as aluminium, cement, and chemicals, depreciation provision contributed significantly to the higher levels of internal resource mobilisation.

It could be concluded from the above analysis that differences did exist across industries but those were more in terms of magnitudes rather than the direction, of changes in the pattern of financing.

Section II : Inter-size Differences in Pattern of Financing

The size-group-wise data relating to sources and uses of funds were published in RBI company finance studies only for the period 1966-71. However, in Census of Public Limited Companies published by RBI for 1971-72, 1976-77, and 1981-82⁴, we get the size-group-wise data on sources and uses of funds. In order to

⁴This publication is named Public Limited Companies in India 1980-82, A profile, RBI, Bombay.

have uniformity, we will use the census data on the medium and large public limited companies to understand the relationship between size and pattern of financing.

Sources of funds : Size-group-wise:

Data are available in respect of 7 size groups i.e, Rs. 5 lakhs - 10 lakhs, Rs. 10 lakhs - 25 lakhs, Rs. 25 lakhs - 50 lakhs, Rs. 50 lakhs - 1 crore, Rs. 1 crore - 2 crores, Rs. 2 crores - 5 crores and Rs. 5 crores and above. For our purpose, companies with a paid-up-capital below Rs.25 lakhs will be referred to as small size group, those with paid up capital above Rs. 1. crore as large size group and those in between these two, are treated as medium size group. The analysis is made in respect of three time points.

1971-72: The data on the relative shares of different sources of funds as in 1971-72 are presented in table 3.2(a). It is observed that the importance of internal sources increased with size of firms. For all size-groups, the bulk of internal funds was accounted by the provision and that too by the depreciation provision. Here again, the relative importance increased with the size of firms. It also emerged that the bigger the size of the firms, the lower the dependence on the external sources. In other words, the smaller firms tended to depend more on borrowings (mostly from banks) and trade dues and other current liabilities as compared to medium and larger firms.

Table 3.2(a)
Sources of Funds According to Size of Paid-up-Capital, 1971-72.

(Percentages to Total Sources)

| Sources of Funds | Rs 5 lks to Rs 10 lks | Rs 10 lks to Rs 25 lks | Rs 25 lks to Rs 50 lks | Rs 50 lks to Rs 1 cr. | Rs 1 cr. to Rs 2 crs | Rs 2 crs to Rs 5 crs | Rs 5 crs and Above | TOTAL |
|-----------------------|-----------------------|------------------------|------------------------|-----------------------|----------------------|----------------------|--------------------|--------|
| | <u>Small</u> | | <u>Medium</u> | | <u>Large</u> | | | |
| I. Internal Sources | 30.69 | 30.37 | 31.12 | 46.91 | 48.07 | 65.62 | 73.29 | 56.36 |
| 1. Paid-up-capital | 0.28 | 1.18 | 2.22 | 2.00 | 1.36 | 3.27 | 6.04 | 3.33 |
| 2. Reserves & Surplus | 5.91 | 1.98 | -5.67 | 9.49 | 11.63 | 16.83 | 18.00 | 12.10 |
| 3. Provisions | 24.49 | 27.19 | 34.58 | 35.32 | 35.07 | 45.52 | 49.25 | 40.94 |
| Of which: | | | | | | | | |
| (i) Depreciation | 19.76 | 22.91 | 26.40 | 28.21 | 30.03 | 38.48 | 41.38 | 34.07 |
| (ii) Taxation | 3.10 | 2.18 | 3.78 | 2.45 | 1.59 | 3.92 | 2.63 | 2.83 |
| II. External Sources | 69.26 | 69.65 | 68.89 | 53.19 | 51.93 | 34.38 | 26.71 | 43.64 |
| 4. Paid-up-capital | 2.76 | 3.99 | 4.70 | 2.32 | 2.94 | 4.02 | 2.64 | 3.24 |
| Of which: | | | | | | | | |
| (i) Net Issues | 2.76 | 3.72 | 4.70 | 2.32 | 1.96 | 3.64 | 1.32 | 2.71 |
| 5. Borrowings | 33.67 | 31.03 | 29.75 | 25.33 | 26.84 | 18.80 | 2.35 | 18.19 |
| 6. From Banks | 18.41 | 22.49 | 15.84 | 13.99 | 17.98 | 2.78 | 5.30 | 10.21 |
| 7. From DFIs | 2.82 | 3.31 | 5.90 | 2.43 | 1.52 | 0.82 | -9.01 | 1.08 |
| 8. From Govt. Bodies | 0.06 | 0.79 | 0.91 | -0.09 | 0.77 | 3.28 | -1.63 | 0.52 |
| 9. Others | 14.81 | 17.53 | 11.81 | 10.28 | 0.90 | 2.14 | 7.23 | 8.01 |
| 10. Trade Dues & DLs | 32.83 | 34.63 | 34.44 | 25.55 | 22.15 | 11.55 | 21.71 | 22.21 |
| 11. Sundry Creditors | 17.85 | 17.08 | 22.63 | 15.19 | 13.14 | 9.79 | 14.21 | 14.19 |
| III. TOTAL | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Census of Public Limited Companies, 1971-72, RBI, Bombay.

1976-77: The data for the year 1976-77 [Table 3.2(b)] tend to endorse the size-groups characteristics observed in 1971-72.

Interestingly, as between these two points of time the proportion of resources raised through internal sources had declined for all size groups. Yet it was found that the bigger the firms the larger the proportion of internal sources. Another noteworthy change was the relative decline in the share of provisions in 1976-77 as compared to 1971-72. Also, the role of reserves and surplus declined in the later period. To some extent this was compensated by the increasing share of paid-up capital, which more or less increased with the size of firms. As for external sources, its relative importance declined with the increase in firm size as was the case in 1971-72, but the magnitude of its share was higher for all firms and more so for the small-sized firms.

1981-82: The data on relative share of different sources of funds as in 1981-82 are set out in Table 3.2(c). The proportion of funds raised through internal sources had gone down in 1981-82 for all size groups as compared to 1971-72. The large size groups continued to account for higher proportion of internal sources. The differential pattern was accounted mainly due to higher level of reserves and surplus. The proportion of resources mobilised through depreciation got almost equalised for all size groups. The firms in medium and large size-group (excepting the size group Rs. 2 crores - Rs. 5 crores) had higher proportion of borrowings than the small size-group firms. But borrowings from banks was comparatively of lower proportion for large size-group of firms as compared to small and medium size-

Table 3.2(b)

Sources of Funds According to Size of Paid-up-Capital, 1976-77.

(Percentages to Total Sources)

| Sources of Funds | Rs 5 lks to Rs 10 lks | Rs 10 lks to Rs 25 lks | Rs 25 lks to Rs 50 lks | Rs 50 lks to Rs 1 cr. | Rs 1 cr. to Rs 2 crs | Rs 2 crs to Rs 5 crs | Rs 5 crs and Above | TOTAL |
|-----------------------|-----------------------|------------------------|------------------------|-----------------------|----------------------|----------------------|--------------------|--------|
| | <u>Small</u> | | <u>Medium</u> | | <u>Large</u> | | | |
| I. Internal Sources | 20.29 | 7.53 | 3.77 | 12.14 | 31.85 | 39.94 | 48.78 | 32.68 |
| 1. Paid-up-capital | 1.95 | 1.38 | 4.67 | 4.73 | 7.15 | 4.92 | 11.60 | 7.12 |
| 2. Reserves & Surplus | -5.30 | -22.86 | -29.73 | -29.89 | -5.33 | 2.94 | -0.34 | -6.38 |
| 3. Provisions | 23.64 | 28.22 | 28.83 | 37.30 | 30.02 | 32.08 | 37.52 | 31.94 |
| Of which: | | | | | | | | |
| (i) Depreciation | 18.93 | 21.56 | 31.34 | 37.40 | 25.71 | 30.33 | 38.43 | 38.97 |
| (ii) Taxation | 3.31 | 4.53 | -0.43 | 2.68 | 5.44 | 2.53 | 0.47 | 1.99 |
| II. External Sources | 79.71 | 92.47 | 96.25 | 87.86 | 68.16 | 60.06 | 51.22 | 67.32 |
| 4. Paid-up-capital | 4.40 | 6.23 | 6.37 | 5.38 | 6.11 | 8.57 | 2.38 | 6.73 |
| Of which: | | | | | | | | |
| (i) Net Issues | 4.40 | 6.23 | 6.36 | 5.15 | 5.77 | 8.38 | 1.45 | 6.28 |
| 5. Borrowings | 24.69 | 39.55 | 39.04 | 41.68 | 29.69 | 29.63 | 37.20 | 36.26 |
| 6. From Banks | 19.12 | 26.86 | 24.89 | 31.69 | 9.89 | 11.94 | 19.73 | 18.42 |
| 7. From DFIs. | 5.02 | 5.30 | 8.88 | 5.20 | 10.10 | 1.91 | 4.71 | 6.79 |
| 8. From Govt. Bodies | 0.31 | 0.89 | 0.40 | 0.24 | 5.14 | 4.29 | 9.91 | 5.40 |
| 9. Others | 0.19 | 7.30 | 4.88 | 4.55 | 5.37 | 11.50 | 2.85 | 5.66 |
| 10. Trade Dues & DLs | 50.43 | 45.74 | 49.76 | 40.13 | 32.37 | 21.73 | 11.51 | 24.84 |
| 11. Sundry Creditors | 21.46 | 27.14 | 37.62 | 23.98 | 12.63 | 18.17 | 9.69 | 15.88 |
| III. TOTAL | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Census of Public Limited Companies, 1976-77, RRI. Bombay.

Table 3.2(c)

Sources of Funds According to Size of Paid-up-Capital, 1981-82.

(Percentages to Total Sources)

| Sources of Funds | Rs 5 lks to Rs 10 lks | Rs 10 lks to Rs 25 lks | Rs 25 lks to Rs 50 lks | Rs 50 lks to Rs 1 cr. | Rs 1 cr. to Rs 2 crs | Rs 2 crs to Rs 5 crs | Rs 5 crs and Above | TOTAL |
|------------------------|-----------------------|------------------------|------------------------|-----------------------|----------------------|----------------------|--------------------|--------|
| | <u>Small</u> | | <u>Medium</u> | | <u>Large</u> | | | |
| I. Internal Sources | 15.24 | 16.02 | 24.71 | 16.74 | 26.19 | 31.67 | 31.28 | 27.97 |
| 1. Paid-up-capital | 0.73 | 1.22 | 1.79 | 1.41 | 2.23 | 2.23 | 2.18 | 2.02 |
| 2. Reserves & Surplus | 0.12 | 2.64 | 7.51 | 2.75 | 9.23 | 11.83 | 12.51 | 10.09 |
| 3. Provisions | 14.39 | 12.16 | 15.41 | 12.58 | 14.73 | 17.62 | 16.60 | 15.85 |
| Of which: | | | | | | | | |
| (i) Depreciation | 13.11 | 12.06 | 14.67 | 13.30 | 14.81 | 16.66 | 15.68 | 15.21 |
| (ii) Taxation | -0.06 | -0.26 | -0.35 | -1.66 | -1.06 | -0.80 | -0.50 | -0.72 |
| II. External Sources | 84.73 | 83.98 | 75.29 | 83.26 | 73.81 | 68.33 | 68.72 | 72.03 |
| 4. Paid-up-capital | 0.73 | 1.25 | 1.84 | 1.45 | 2.29 | 2.29 | 2.24 | 2.08 |
| 5. Borrowings | 36.09 | 36.01 | 38.04 | 42.19 | 37.55 | 31.65 | 38.15 | 37.23 |
| 6. From Banks | 28.00 | 22.11 | 23.04 | 23.03 | 18.03 | 10.01 | 10.66 | 14.07 |
| 7. From GFIs. | 1.28 | 4.30 | 8.96 | 10.25 | 11.56 | 11.43 | 13.05 | 11.54 |
| 8. Others (Debentures) | 7.58 | 9.60 | 6.85 | 8.91 | 7.95 | 10.21 | 14.44 | 11.61 |
| 9. Trade Dues & GLs | 8.15 | -0.07 | 0.14 | 0.31 | 1.84 | 1.70 | 4.92 | 2.97 |
| III. TOTAL | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Note: The composition of paid-up-capital in to capitalised reserves and new issues were not given in the above publication. Taking the proportion from 1981-82 company finance study of RBI relating to medium and large public limited companies the break-up of total paid up capital was worked out (under the assumption that the proportion is same for all the size groups) and the classification into internal and external sources was done accordingly.

Source: Public Limited Companies in India 1980-82 A Profile, RBI.

group. The large size-group raised higher proportion of resources from other financial institutions and through 'other borrowings' as compared to small and medium size-groups of firms. Debenture which had emerged as a powerful instrument of resource mobilisation was utilised mostly by the bigger firms and the largest size firm group (Rs. 5 crores and above) raised about 5 per cent of total resources through debentures. As in the earlier period, trade dues and other liabilities accounted for higher proportion of resources for the small firms as compared to the medium and large firms.

Thus, the capital structure of firms of different size-groups did show some differential patterns. In particular the relatively higher level of internally generated resources by the firms in the large size groups deserves some special mention. Probably, relatively higher profitability (which helps in generating more surplus) and also relatively higher propensity in uses of funds for fixed capital formation (which enables higher level of depreciation) of the large sized firms account for the differential financing pattern as compared to firms in smaller groups. In this context, Table 3.3 sets out information on profitability and fixed assets formation for all size classes. It emerged that a positive correlation between size of firm and their profitability could be inferred whether the profitability is measured as a ratio of either gross profits to total net assets or profits after tax to net worth. Profitability was higher for the larger size-group as compared to smaller size-

Table 3.3

**Profitability, Fixed Asset Formation and Interest Cost of Operating
Medium and Large Public Limited Companies - According to Size
of Paid-up-Capital**

| I t e m s | Rs.5 | Rs.10 | Rs.25 | Rs.50 | Rs.1 | Rs.2 | Rs.5 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|
| | lakhs | lakhs | lakhs | lakhs | crores | crores | crores |
| | -Rs.10 | -Rs.25 | -Rs.50 | -Rs. 1 | -Rs.2 | -Rs.5 | and |
| | lakhs | lakhs | lakhs | crore | crores | crores | above |
| 1971-72 | | | | | | | |
| 1. GP as a % of TNA | 7.1 | 6.9 | 7.1 | 9.2 | 9.7 | 10.5 | 12.0 |
| 2. PAT as a % of NW | 4.4 | 4.0 | 3.4 | 8.3 | 8.4 | 10.9 | 12.2 |
| 3. GFA as a % of TUF | 34.5 | 36.9 | 37.4 | 37.4 | 37.0 | 60.8 | 48.4 |
| 4. P&M as a % of TUF | 18.0 | 22.0 | 26.8 | 27.4 | 22.9 | 46.0 | 33.9 |
| 1976-77 | | | | | | | |
| 1. GP as a % of TNA | 9.2 | 7.2 | 7.3 | 7.5 | 10.1 | 11.4 | 11.1 |
| 2. PAT as a % of NW | 1.6 | 2 | 2 | 2 | 5.7 | 8.1 | 8.7 |
| 3. GFA as a % of TUF | 35.2 | 52.0 | 51.3 | 50.4 | 54.2 | 56.6 | 60.9 |
| 4. P&M as a % of TUF | 16.0 | 36.6 | 31.6 | 47.8 | 39.8 | 48.0 | 44.8 |
| 1981-82 | | | | | | | |
| 1. GP as a % of TNA | 7.7 | 8.0 | 8.7 | 9.1 | 11.2 | 11.4 | 11.5 |
| 2. PAT as a % of NW | 1.9 | 3.4 | 3.9 | 7.7 | 11.5 | 13.8 | 14.4 |
| 3. GFA as a % of TUF | 32.7 | 39.9 | 48.0 | 39.7 | 45.0 | 44.8 | 48.6 |
| 4. P&M as a % of TUF | 17.3 | 28.6 | 33.6 | 32.3 | 32.1 | 34.2 | 30.3 |

2 Numerator is negative

GP = Gross Profit, TNA = Total Net Assets, PAT = Profit After Tax,
NW = Net Worth, GFA = Gross Fixed Assets, TUF = Total Uses of Funds,
P&M = Plant & Machinery.

Source: Census of Public Limited Companies in India 1971-72 and
1976-77 and Public Limited Companies in India 1980-82, A
Profile, RBI, Bombay.

group⁵. It stands to reason that the higher profitability led to higher level of reserves and surplus, and consequently lower dependence on external finance in the case of firm in large size groups. Table 3.3 also depicted that the bigger the size of firm, the higher the proportion of funds invested in fixed assets, particularly plant and machinery. It could be said that the higher level of depreciation due to fixed assets would have resulted in higher proportion of internal sources for firms in the larger sized groups.

Summary

The foregoing analysis provided us with some insights into the financing behaviour at disaggregated level of the private corporate sector in India. The industry-group wise analysis indicated that in the industry differences did exist in the magnitudes of different components of sources of funds depending upon capital intensiveness, profitability and nature of operation.

Broadly, the financing behaviour of all major industry-groups confirmed to the patterns observed at the macro-level for the corporate sector as a whole. The general trends both at industry group as well as at the macro level were marked by a decline in proportion of internal sources, increasing 'borrowing-orientation', and increasingly larger proportion of trade dues and other current liabilities in the capital structure particularly during the eighties.

⁵For a detail analysis of size and profitability refer to N. Shanta (1979).

There also existed some differences in the pattern of financing among the size-groups of firms. The smaller size-groups were relatively more dependent upon external sources as compared to the large-sized firms. A significant part of total sources of funds of the smaller size-groups came in the form of trade credit. The large-sized firms could raise more of internal resources through depreciation due to higher investment in gross fixed assets as a percentage of their total use of funds. As the large-sized firms were also generally associated with higher profitability they could also make larger provisions for reserves and surplus and thereby augment the internal sources of funds for growth.

Notwithstanding the specific characteristics of individual industries and across size-groups of firms, the direction of change over time in the pattern of finance was marked by the decline in share of internal sources, and increasing dependence on borrowing and trade credit in the private corporate sector in India.

Chapter IV

CHANGING PATTERN OF FINANCING : ROLE OF MACRO ECONOMIC VARIABLES

The focus of the study so far has been on tracing the changes in the capital structure of the private corporate sector between 1961-62 and 1985-86. The analysis brought out the changing pattern of financing. These changes must have been activated by some variables in the economic system. Our endeavour in this chapter is to examine the role of some macro economic variables and interest-rate structure in shaping the pattern of corporate financing in India.

Section I : Macro Economic Trends and Patterns of Financing

It is natural to anticipate that the economic conditions will have a bearing upon the pattern of financing of the corporate sector. This is particularly important because of the fact that noticeable variations occurred in economic conditions during the period of our study i.e., 1961-62 to 1985-86. The important economic variables capable of exerting influence on the pattern of financing are: (i) growth of industrial production (ii) capacity utilisation and (iii) inflation. In this Section the impact of each of them in shaping the pattern of financing of private corporate sector is analysed.

(1) Industrial Production:

It is a widely accepted view that Indian industry went through a phase of stagnation since mid-sixties after a period of

stable and steady growth¹. The industrial sector appeared to have recovered since mid-seventies and the eighties is stated to be a high growth phase. For sake of illustration, we may quote some figures from Raj².

| <u>Gross Value Added in Manufacturing Sector</u> | |
|--|---------------------|
| Period | Average Growth rate |
| 1960-61 to 1967-68 | 5.78 |
| 1968-69 to 1975-76 | 4.34 |
| 1976-77 to 1983-84 | 5.00 |

There are other studies which have argued taking different data base that the growth in industry is much higher during the 1980's. Even Raj argued that the growth of industrial output since mid-seventies might have been closer to the level experienced during the fifties and first half of the sixties³. Our concern is not to go into the details of the debate but to analyse the implications of such ups and downs (cyclical pattern) in industrial growth on the pattern of financing of the private corporate sector.

When we juxtapose the broad pattern of financing of the private corporate sector on the pattern of industrial growth, some interesting points emerge. Internal sources as a proportion of total sources of funds declined during the initial period of

¹For detailed discussions on the stagnation and its aftermath refer to K.N. Raj (1976 and 1984), S.L. Shetty (1978), I.J. Ahluwalia (1985), C.P. Chandrasekhar (1988) and R. Nagaraj (1989)

²K.N. Raj (1984), p.1801.

³Ibid, p.1802.

stable growth of industrial production. Its share fell gradually from 55.1 per cent in 1961-62 to 41.3 per cent in 1967-68 and more proportion of external sources of funds were used. The share of internal sources went up steadily during the period 1968-69 to 1972-73, ranging between 50.3 per cent to 73.4 per cent. A look at the raw data indicated that not only the share of internal finance increased during the above period but also there was a significant increase in the absolute amount of internal funds mostly generated through depreciation and reserves and surplus. In contrast, the amounts of external funds generated per year during 1967-68 to 1972-73 were less than the amounts raised during 1966-67. More strikingly, there was net repayment to the financial institutions during 1969-70 to 1972-73 and to the banks during 1972-73.

It may be mentioned that a substantial part of the accrual to internal sources during the above period came from depreciation provisions and development rebate/investment allowance reserves which were tax free and interest free funds. Corporate savings contributed less of funds as indicated by the lower retention ratios during the period 1967 to 1972-73. The resort to external finance on the other hand, required voluntary efforts on the part of the corporate sector for which stimulations were lacking due to stagnation.

With the revival of the economy from the mid of seventies, the proportion of external sources used also started increasing. During the high industrial growth phase of eighties, the proportion of external funds used were the highest as

discussed in Chapter II. The economic rationale behind this sort of development may be explained in terms of demand for funds. During recessionary phase, net expansion would have been low and hence the demand for external funds would have been low. During the period of revival and prosperity, the higher expansion would have necessitated, higher funds and hence the proportion of external sources of funds was high. It may be stated that since 1977-78, internal funds started growing fast not only due to tax related sources but also due to net savings (retained profits) of the corporate sector. However, the relatively larger growth of external sources of funds as compared to internal sources resulted in the decline in the proportion of internal sources. In short, external funds were raised when market opportunities warranted a faster rate of growth than possible with internal funds.

(ii) Capacity Utilisation:

We may now examine capacity utilisation which could be another macro variable affecting the financing behaviour of the corporate sector. The analysis is based on potential utilisation ratio⁴. A look at the potential utilisation ratios indicated to three distinct phases:

(i) High potential utilisation phase during 1961-65 - the ratio ranged between 88 to 89 percent which corresponded to our 1st phase of steady industrial growth and also the period of higher proportion of external sources.

(ii) Declining and comparatively lower utilisation phase during 1966-73 - the ratio ranged between 77 to 83 percent

⁴Reserve Bank of India used to publish these data up to 1973 on calendar year basis. R. Anandaraj has computed the potential utilisation ratios through an exercise of aggregating four digit level industries. I am thankful to him to have passed on the information for the use of my study.

(it was more than 80 per cent only in the year 1966) which more or less corresponded to the phase of industrial recession and rising proportion of internal sources.

(iii) Rising phase of potential utilisation ratios during 1974-84 - the ratio ranging between 81 to 92 per cent which again corresponded to the phase of industrial revival and higher proportion of external sources of funds.

As empirically proved by Meyer and Kuh, during periods of high capacity utilisation, acceleration forces are dominant and internal funds are secondary in the determination of investment rates. Contrarily, during periods of less than full capacity, the dominant guide to investment comes from internal funds primarily as a liquidity constraint⁵.

Analysis of growth rates of index of potential production and actual production relating to manufacturing industries (1960=100) provided us with the following results.

**Growth Rates of Potential/Actual Industrial Production
(Index of Manufacturing Industries)**

| Items | 1960-73 | 1974-84 | 1960-84 |
|----------------------------------|---------|---------|---------|
| 1. Index of Potential Production | 5.7 | 4.0 | 4.7 |
| 2. Index of Actual Production | 4.6 | 4.8 | 4.5 |
| 3. Excess Capacity (1-2) | 1.1 | -0.8 | -0.2 |

The growth rates are calculated using semi-log functional forms $\log I = a + b t$, where t is time

Sources: (i) Monthly Statistical Abstracts, CSO.
(ii) RBI Monthly Bulletins.

The above table reveals that the potential production increased at a much higher pace than that of actual production

⁵J.R. Meyer and E.Kuh (1957) pp. 190-195.

during 1960-73. During 1974-84 the trend reversed and the growth rates for the period 1960-84 gives a picture of full utilisation of capacity. This finding also corroborates with the observed trends in pattern of financing of the private corporate sector. The excess capacity remained unutilised during the earlier period most probably due to demand constraints and hence there was less demand for external funds. However, during the later phase, there was over utilisation of capacity (including the surplus capacity carried forward) and hence internally generated funds were inadequate; the proportion of external funds increased significantly.

(iii) Inflation:

Inflation is also a potential factor of determining corporate financing proportions⁶. It particularly explains why the corporate sector prefers debt to equity from among external sources of funds. One line of argument is that inflation enables corporations to repay their debt with cheaper rupees, but inflation may also lead to the rise of nominal interest rates. A refined argument revolves around the fact that as it causes to interest to rise, inflation increases the effective real tax deductions associated with debt⁷. Given the deductibility of interest payments against income for tax purposes, the after-tax real interest rates faced by the corporate sector would have been negative during the period of higher inflation. We will be discussing about the structure of interest rates in detail in the

⁶R.A. Taggart, Jr. (1986) p.27, (1985) p. 48.

⁷The effective nominal rates faced by the corporate sector = nominal rate of interest *(1-corporate tax rate). For reaching at real interest rate it has to be netted for rate of inflation.

next section. Suffice to say here that interest rates have been very stable in India as they are administered and raised in phased manner without a direct correspondence with inflation. Hence, the first argument of inflation may be more appropriate to India.

A close look at yearly changes in implicit GNP deflator⁸ will show that the rate of inflation soared and plunged in more or less the similar fashion as that of borrowings. During 1963-64 to 1967-68, the phase of higher inflation, (ranging between 8 to 14 per cent per annum) the proportion of borrowings to total sources had a tendency to rise and also remained at a higher level. The year 1968-69 which saw a negative rate of inflation and succeeded by 3 years of low rates of inflation, also saw declining of proportion' of borrowings. However, in 1972-73, when inflation rate was at 11.3 percent, the proportion of borrowings touched the lowest ebb (1.7 per cent of total sources of funds). This phenomenon probably could be explained in terms of low capacity utilisation and negative domestic capital formation. During 1973-75, the years of "very high" inflation, the proportion of borrowings again started rising and had slight decline during 1975-79, a period of low rates of inflation. Again, an era of higher inflation started with 1979-80 and it continued till 1985-86 and so also the higher proportion of borrowings.

Thus our analysis in this section brought out that macro economic variables like growth of industrial production,

⁸Refer to Table 4.2 in Section II of this Chapter.

capacity utilisation and rate of inflation exerted influence on the pattern of financing of the private corporate sector. While the first two variables explained the proportion of internal versus external sources, the last variable explained the proportion of borrowing in total sources.

Section II : Choice of Securities and Structure of Rates

In a free economy, capital is always attracted to avenues which offer attractive rate of returns. The choice of securities by investors (lenders) is determined by the desire to maximise the yield on the portfolio. By the same token, choice of securities by corporate bodies (borrowers) will be determined by the desire to minimise the interest outflow. However, the choice of securities to borrowers is more restricted than to lenders. This is so because considerations involved in borrowing short and borrowings long are related not so much to the rates of interest as to the uses of funds. Short-term loans generally finance short term uses and long-term loans finance long term uses. If the availability of funds for any use is not adequate or if the interest differentials between short and long loans are excessive, it is possible that the borrowers may shift from one source to another to finance the same use.

The long-term securities have an inherent advantage over short-term securities from companies' point of view. While long term funds can be used for short-term uses, it is not

possible to use short-term funds for long-term uses⁹. The companies can issue long term securities for short-term uses if the short rate is higher than the long rate. After the short period, they can buy back the securities. In this way, they can lower their total interest burden.

The structure of corporate assets also indicate that corporate growth creates a relatively greater demand for capital for long term rather than short-term uses. The demand for capital by the corporate sector is thus weighted in favour of long term funds. Actual demand for short and long-term funds may be different because the corporate sector may be substituting, within limits, one type of funds for another, depending upon the conditions in the financial market. However, corporate sector's demand for long-term funds is generally predominant because of the inherent advantages of long-term capital over short-term capital. Hence, the corporate sector would be willing to pay a higher rate of interest on long term loans than on short loans¹⁰.

Structure of Rates:

Usually, the rates of interest on short-term loans are lower than the long term loans according to the principles of time preference. When the short rate is equal to the long rate, preferences of the companies will be weighted in favour of long securities and the preferences of the investors will be weighted in favour of short securities. Thus, in a perfect competitive

⁹One exception is the instance when short-term loans used to finance long-term operations is allowed to 'roll over' by banks or other agencies.

¹⁰D.H.Pai Panandikar (1973), p.38.

market, the interest rate structure will be determined by demand and supply forces as expressed in the composition of short-term and long term securities which is again determined by the preferences of lenders (investors) and borrowers (companies)¹¹.

The structure of interest rates regulates the flow of funds from investors in the form of different instruments to the corporate sector. Ordinarily, the rate of interest (return) of a security will be higher:

- (1) the greater the element of lender's risk,
- (2) the less marketable is the security or claim and
- (3) the longer is the period of maturity.

Ordinary shares have an indefinite period to maturity and subject to risk with regard to payment of dividend and as such will rank lowest in the scale of preference of the investors unless they earn a very high rate of return. Preference shares, which are akin to ordinary shares but are not strongly subject to investors' risk, will earn less than ordinary shares but more than debentures. Debentures have a fixed maturity period and also entail lender's risk and should earn more than public deposits. Company deposits of longer maturity will carry a higher rate of interest than deposits of shorter maturity.

It is instructive to look at the structure of interest rates in India to find out whether they follow the expected pattern as discussed. There exists a bewildering variety of

¹¹In India, the interest rate structure is administered by the Reserve Bank and Government of India.

rates of interest in the financial market¹². However, the relevant rates from the point of view of corporate sector are presented in Table 4.1.

The most important inference that emerges from Table 4.1 is that all interest rates have increased significantly during the period under study. The increase in different rates is reflected in increase in the interest cost of the medium and large scale industries as a proportion of total borrowings. During the sixties, excepting for the banks, there was no noticeable increase in the rates. Thereafter, all the rates have increased almost simultaneously in phases. The period 1970-74 represented a phase when all the rates ranged between 8-10 per cent excepting for public deposits which had interest ranges (8.0 - 15.0 per cent) and so differentials were negligible. The period 1974-79 represented another phase. Though all the rates increased compared to earlier period, the rate of increase was higher for bank loans supposed to be used for short-term purpose. This differentials continued to exist for the rest of the period. This relationship between short and long rates in India is an arresting contrast to conditions obtaining in other countries¹³. The period 1979-86 was the third phase. The interest rates¹⁴ charged by the term lending institutions was slightly higher than the rates for preference shares (excepting 84-86) and debentures (excepting non-convertible debentures during 1982-86). But the

¹²L.M.Bhole (1982), p. 321-322.

¹³P.R. Brahmananda (1978), p.157.

¹⁴These are prime lending rates. However, the term lending institutions also offer many types of concessional rates.

Table 4.1
Interest Rate Structure of Different Sources of Funds for Private Corporate Sector in India

(Per cent per annum)

| Year | Preference Shares | Debtentures | Public Deposits | Weighted Average lending rate of SCB | Advance Rate of SBI | Prime Lending rate of TLIs [¶] | Interest cost as a % total [§] Borrowing |
|---------|-------------------|-------------------|-----------------|--------------------------------------|---------------------|---|---|
| 1960-61 | 8.5-9.3 | 7.0-7.5 | - | 6.0 | 5.0 | 7.0 | 5.1 |
| 1965-66 | 9.5 | 7.0 | - | 8.7 | 7.5 | 8.0 | 7.0 |
| 1970-71 | 9.5 | 8.0 | - | 9.3 | 8.5 | 8.5 | 8.3 |
| 1971-72 | 9.5 | 8.0 | 8.0-15.0 | 9.7 | 8.5 | 8.5 | 9.1 |
| 1972-73 | 9.5 | 8.0 | 8.0-15.0 | 9.8 | 8.5 | 8.5 | 9.5 |
| 1973-74 | 9.8 | 8.5 | 8.5-13.0 | 10.3 | 9.0 | 9.0 | 9.2 |
| 1974-75 | 11.0 | 10.5 | 9.5-16.0 | 13.9 | 13.5 | 10.25 | 10.9 |
| 1975-76 | 11.0 | 10.5 | 9.5-16.5 | 14.1 | 14.0 | 11.0 | 12.2 |
| 1976-77 | 11.0 | 10.5 | 11.0-16.0 | 13.9 | 14.0 | 11.0 | 12.7 |
| 1977-78 | 11.0 | 10.5 | 11.0-16.5 | 13.0 | 14.0 | 11.0 | 12.8 |
| 1978-79 | 11.0 | 10.5 | 10.5-15.0 | 12.8 | 14.0 | 11.0 | 12.2 |
| 1979-80 | 11.0 | 10.5 | 13.0-15.5 | 13.5 | 16.5 | 11.0 | 12.3 |
| 1980-81 | 11.0 | 13.5 | 13.0-15.5 | 14.4 | 16.5 | 14.0 | 13.1 |
| 1981-82 | 13.5 | 13.5 | 13.0-15.5 | 14.9 | 16.5 | 14.0 | 13.3 |
| 1982-83 | 13.5 | 13.5 [¶] | 10.5-15.5 | 14.0 | 16.5 | 14.0 | 13.5 |
| 1983-84 | 13.5 | 13.5 [¶] | 14.0-15.0 | 14.9 | 16.5 | 14.0 | 13.2 |
| 1984-85 | 15.0 | 13.5 [¶] | 14.0-15.0 | 14.6 | 16.5 | 14.0 | 13.1 |
| 1985-86 | 15.0 [¶] | 13.5 [¶] | 13.0-15.0 | 14.6 | 16.5 | 14.0 | 12.8 |

SCB = Scheduled Commercial Banks, SBI = State Bank of India,

TLI = Term Lending Institutions

‡ For cumulative preference share the rate was fixed at 10.0 per cent.

§ For non-convertible debentures, the ceiling rate was raised to 15.0 per cent from April 17, 1982. The ceiling rate on convertible debenture was also raised for non-FERA and non-MRTP companies to 15.0 per cent from March 18, 1985.

¶ Excepting for 1960-61 (IFCI), data relate to IOBI.

§ For Medium and Large Public Limited Companies, RBI Company finance studies.

Since the ranges of interest on public deposits are different according to maturity period, only interest range for maturity of 3 years are mentioned

The Weighted Average lending rates of Scheduled Commercial banks are worked out by taking proportion of total amount outstanding at a time as weight. The figures are computed for the end of December but assumed to represent the succeeding years.

Source: (i) Reports on Currency and Finance, RBI.

(ii) Statistical Tables Relating to Banking in India, RBI.

(iii) Basic Statistical Returns, Banking Statistics, RBI.

advance rate of SBI was higher than the long rates and even higher than the ceiling rate for public deposits.

In the organised sector, the slower rise in the long rates may be attributed mainly to two reasons¹⁵. Firstly, fixed asset formation has been regarded as desirable for the economy, and as such, the cost of long-term investment has been deliberately kept low. Secondly, the setting up of a number of term-lending institutions facilitated the availability of long term finance at lower rates. They obtained concessional finance from the Government and RBI for their operations and profitability had not been a predominant consideration for their lendings. At the same time, short-term rates had been stepped up as it was found that short term finance was being used for holding excessive inventories which among other factors caused inflationary pressures. The increase in short-rates has thus been regarded as an instrument to fight inflation in the country.

The rates of interest on public deposits are administered since 1971-72. They are in the form of different ranges for different maturity period¹⁶. The interest ranges are fixed to encourage competition among the companies and a company with better financial standing may be able to attract deposits at a lower rate of interest. We have presented the interest ranges on public deposits of 3 years to maturity in Table 4.1. It can be seen that the highest rates on public deposits have been

¹⁵L.M. Bhole, Op.cit.p. 343.

¹⁶The acceptance of deposits for periods more than 3 years has been prohibited from April 1, 1978 in terms of "Companies (Acceptance of Deposits) Rules, 1975.

higher than the other rates (excepting the SBI advance rate since 1979-80). The higher rates offered on public deposits as compared to other securities might have motivated the investors to hold them on a larger scale. As we have seen in Chapter II (Table 2.8), they have been a significant source of external capital during the seventies and eighties.

The interest rates on preference share used to be higher than on debentures during 1960's and 1970's. We have discussed in Chapter II (Table 2.10) that during 1965-75, they were accounting for 14 to 15 per cent of capital raised during the year by the medium and large companies. During the 1980's the rates of debentures were on the higher side than that of preference shares. Consequently, debentures have become a very significant source of funds particularly during the eighties (Tables 2.8 and 2.10).

The prime lending rates of the term lending institutions have been much lower as compared to commercial bank rates since mid-seventies. As a corollary, the corporate sector increasingly relied upon them for finance since that time and the reliance on the banks declined gradually.

The return on ordinary shares is not strictly comparable with interest rates on other financial claims. Yet, since shares represent an alternative method of investment, investors compare the yield on shares with interest rates on other financial assets. The total rate of return on ordinary shares is composed of (i) gross yield and (ii) capital gains.

The total real return is computed after netting out the rates of inflation (yearly changes in GDP deflator). These data are presented in Table 4.2

The gross yield on shares remained almost stable over the period 1961-85 within a range of 4.5 to 7 per cent. The rate of capital gains have been negative for many years and after netting out for inflation, the total real return have been negative for 1962-68, 1971-73, 1974-76 and 1982-83. But the total real rate of return turned out to be high during 1968-71, 1978-79, 1981-82 and of course in 1985-86. But the preference patterns for ordinary shares as expressed in the proportion of new issues of equity in total sources of finance for the medium and large public limited companies did not seem to be rational. It had been high during early 1960's when net rate of returns were negative. It had been also low during some of the years when rates of return were high. It speaks of relatively dormant capital market in India and relatively less involvement of public in investing in shares. However, the onus of issuing equity capital lies with the companies¹⁷ and in India the corporate entities do not seem to be enthusiastic about it due to various factors already discussed in Chapter II. The capital market is undergoing a revolutionary change during recent years and probably in future companies will be induced to mobilise resources through share capital and the investors will be discerning as to investment in shares of public limited companies.

¹⁷This can be done only with the approval from the Controller of Capital Issues.

Table 4.2
Return on Ordinary Shares in India

(Per cent per annum)

| Year | Gross Dividend Yield | Yearly changes in Price Index of Ordinary Shares | Total Nominal Return (2)+(3) | Yearly changes in Implicit GDP price Deflator‡ | Total Real Return (4)-(5) | New Issues of Equity Capital as % of total sources of funds‡ |
|---------|----------------------|--|------------------------------|--|---------------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1961-62 | 4.67 | 5.53 | 10.20 | 2.24 | 7.96 | 11.63 |
| 1962-63 | 4.85 | -2.34 | 2.51 | 4.88 | -1.57 | 8.50 |
| 1963-64 | 4.90 | -6.88 | -1.98 | 8.70 | -10.68 | 7.69 |
| 1964-65 | 5.58 | -5.48 | 0.10 | 8.94 | -8.84 | 5.78 |
| 1965-66 | 6.49 | -10.88 | -4.39 | 9.31 | -13.70 | 5.32 |
| 1966-67 | 6.01 | 4.51 | 10.52 | 14.54 | -4.02 | 3.97 |
| 1967-68 | 6.41 | -4.32 | 2.09 | 7.81 | -5.72 | 4.89 |
| 1968-69 | 5.31 | 6.51 | 11.82 | -0.41 | 12.23 | 7.81 |
| 1969-70 | 4.49 | 13.47 | 17.96 | 4.02 | 13.96 | 5.97 |
| 1970-71 | 5.53 | 9.89 | 15.42 | 2.99 | 12.43 | 2.36 |
| 1971-72 | 6.49 | -4.98 | 1.59 | 5.23 | -3.64 | 2.53 |
| 1972-73 | 6.99 | 1.37 | 8.36 | 11.33 | -2.97 | 2.27 |
| 1973-74 | 5.59 | 18.88 | 24.47 | 10.77 | 5.70 | 1.13 |
| 1974-75 | 3.36 | -1.83 | 1.53 | 16.83 | -15.30 | 1.29 |
| 1975-76 | 5.43 | -13.51 | -8.08 | -4.30 | -3.78 | 1.97 |
| 1976-77 | 6.14 | 6.78 | 12.92 | 6.73 | 6.19 | 2.97 |
| 1977-78 | 6.47 | 3.37 | 9.84 | 3.88 | 5.96 | 1.76 |
| 1978-79 | 5.66 | 21.42 | 27.08 | 1.98 | 25.18 | 1.89 |
| 1979-80 | 5.83 | 9.82 | 15.65 | 14.96 | 0.69 | 1.38 |
| 1980-81 | 5.88 | 11.52 | 17.40 | 11.88 | 6.48 | 0.82 |
| 1981-82 | 5.51 | 20.04 | 25.55 | 9.04 | 16.51 | 1.94 |
| 1982-83 | 5.86 | -5.74 | 0.12 | 8.38 | -8.26 | 1.13 |
| 1983-84 | 5.18 | 9.57 | 14.75 | 9.43 | 5.32 | 3.56 |
| 1984-85 | 4.56 | 7.37 | 11.93 | 6.42 | 5.51 | 1.25 |
| 1985-86 | 3.21 | 63.81 | 66.22 | 7.18 | 59.04 | 1.24 |

‡ 1970-71 = 100

‡ For Medium and Large Public Limited Companies.

Source: (i) RBI Monthly Bulletins, RBI.
(ii) National Accounts Statistics, CSO.
(iii) Vinay D. Lall et.al (1982), p.148.

Thus the preference pattern of the investors and also the corporate sector as to different rates of interest was very much rational and in tune with expected pattern. However, the rates of return on ordinary shares seemed not to have guided the preference of the investor.

Summary

The changing pattern of financing from internal to external sources and within external sources, a tendency for increasing borrowing proportion have been explained in terms of macro economic variables and interest policies in this chapter. Whereas, the periods of high growth of industrial output and high potential utilisation ratio tended to induce the corporate sector to use more of external sources, internal sources contributed a higher proportion of total sources during sluggish growth and low capacity utilisation. Inflation and proportion of borrowings in the capital structure of the corporate sector appeared to move in the same directions barring a few exceptions. Interest rate policy appeared to influence the holding of different corporate securities/claims. The higher interest offered on debentures and public deposits might have induced the investors to hold them on larger scale whereas a lower interest charged by the term lending institutions might have prompted the corporate sector to rely on them for increasing proportion of funds¹⁸.

Thus, the management of macro economic policies exerts its influence on the capital structure of the corporate sector.

¹⁸According to S.L.Shetty (1978), "Liberal availability of public funds at relatively cheap cost encouraged promoters to siphon off funds through inflation of project costs, fictitious costs overruns as such other devices", p.233.

Growth inducing policies which ensures higher growth rates of industrial output and higher capacity utilisation may prompt the corporate sector to go for increasing proportion of external finance. The management of inflation will also have its impact on the borrowing orientation of the corporate sector. Investing public and the corporate sector also take in to account the rates of interest while revealing their preference for any particular form of security/claim. Thus, interest rate policy plays an important role and can be effectively utilised for discerning of any component in the capital portfolio of the corporate sector.

Chapter V

DETERMINANTS OF CORPORATE SAVINGS

We find in our analysis that the declining share of internal sources is a characteristic feature of the changing pattern of financing in the Indian Corporate Sector. A critical item among internal sources is the corporate savings. It appears, therefore, relevant that we explore the determinants of corporate savings in India. This is the scope of the present chapter.

A corporate entity allocates profits secured after tax between two competing heads, i.e., dividends and retention. By definition, corporate saving equals net income (profit after tax) less dividend payments and is represented in the item, retained profit, in a company's income and expenditure accounts.

Rates of Corporate Savings

In the sources and uses of funds statements, retained profit constitutes a component of reserves and surplus of internal sources of funds. It may be mentioned that there is no close correspondence between RBI's presentation of data on sources and uses of funds and on income and expenditure. The data in the former statement are derived entirely from balance sheet changes and no attempt is made to reconcile the changes in reserves and accumulated depreciation as per income statement. The correct procedure in constructing a sources and uses of funds statement would be to derive figures of depreciation provision and retained income from the income statement and not from balance sheet changes which are affected by numerous purely book-

keeping transfers from one account to the other¹. The data on profit after tax, retained profit and dividend obtained from the statements of income and expenditure are presented in Table 5.1.(all the figures are in percentage of net-worth).

Table 5.1

Rates of Profitability and Retained Profit and Dividends

| Year | As a percentage of Net-worth | | |
|---------|------------------------------|-----------------|----------|
| | Profit after Tax | Retained Profit | Dividend |
| 1961-62 | 10.00 | 3.64 | 6.36 |
| 1962-63 | 8.72 | 2.94 | 5.77 |
| 1963-64 | 9.47 | 3.67 | 5.80 |
| 1964-65 | 9.32 | 3.59 | 5.74 |
| 1965-66 | 8.66 | 3.11 | 5.56 |
| 1966-67 | 9.12 | 3.66 | 5.47 |
| 1967-68 | 7.26 | 2.07 | 5.19 |
| 1968-69 | 7.00 | 1.90 | 5.11 |
| 1969-70 | 9.51 | 4.08 | 5.43 |
| 1970-71 | 10.10 | 4.36 | 5.74 |
| 1971-72 | 10.79 | 5.38 | 5.41 |
| 1972-73 | 10.41 | 4.93 | 5.47 |
| 1973-74 | 11.61 | 6.88 | 4.73 |
| 1974-75 | 13.67 | 9.66 | 4.00 |
| 1975-76 | 8.20 | 3.49 | 4.71 |
| 1976-77 | 7.87 | 2.74 | 5.13 |
| 1977-78 | 8.78 | 3.54 | 5.24 |
| 1978-79 | 11.46 | 5.94 | 5.51 |
| 1979-80 | 14.53 | 9.04 | 5.49 |
| 1980-81 | 14.86 | 9.46 | 5.39 |
| 1981-82 | 14.22 | 9.14 | 5.08 |
| 1982-83 | 11.97 | 7.34 | 4.62 |
| 1983-84 | 7.59 | 3.46 | 4.13 |
| 1984-85 | 7.64 | 3.67 | 3.97 |
| 1985-86 | 7.91 | 4.37 | 3.54 |

Source: Same as Table 2.3

¹L.C.Gupta (1969), p.24.

It is evident that profitability (profit after tax as a percentage of net worth) fluctuated over the period 1961-86 in the range of 7.0 per cent to 14.9 per cent with a coefficient of variation (C.V.) of 22.9 percent. Dividend rate was relatively stable over the period and moved in the narrow range of 3.54 to 6.36 per cent with a low C.V. of 12.8 per cent. The rate of retained profit - the residual of the two above variables, also fluctuated like rate of profit in a broad range of 1.90 to 9.66 over the period and had a high C.V. of 47.3 per cent.

Factors Determining Retained Profits

Net income is evidently the conditioning factor for any stream of savings. The relationship between the two is of a fundamental character and is termed as propensity to save. Since the net income (profit after tax) of the corporate sector is available for several competing uses (dividends, reserves, carry forward etc.), the portion that has to be retained must be determined in such a way that the interests of owners are best subserved. In other words, the amount of retained profits depends on the size of net income, the required size of reserves, the needs of expansion, and dividend requirements².

Dividend requirement is an important force which plays a major role in determining the amount of profit to be retained from net income. However strong the management's preference for retention and internal financing might be, a part of net income has to be distributed as dividends. The proportion of net income to be distributed may be decided on the basis of shareholders'

²S.P.Dobrovolsky (1951), pp.34-36.

pressure for dividends. However, the shareholders' interest in dividend distribution remains stable from year to year³. The managements also do not change the dividend rate abruptly. They are conservative in giving effect to sizeable revisions. Dividend policies typically take the form of a relatively fixed pattern of adjusting the existing dividend payments more or less gradually to bring them in line with a stated target pay out ratio, with the result that only rather small fraction of current changes in profits will be absorbed in dividends⁴.

Expansion requirements also exert influence on retained profit. The financing of asset expansion through retained profit has many advantages over external financing. It does not involve negotiations with outside agencies. It obviates the need for specific commitments about the rate of return to be paid on the funds, length of time they will remain in enterprise, or the use to which they will be put. The question arises whether to relate gross retained earnings (net retained profit + depreciation provision) with gross expansion or to relate net retained profit with net expansion. Dobrovolsky as well as Lintner favoured the latter⁵.

The relationships between the three variables, viz., net income, dividend and retained profit have been studied by Tinbergen(1929), Dobrovolsky(1951) and Lintner(1956). Whereas Tinbergen and Lintner basically explained the dividend behaviour,

³Ibid, p.37.

⁴J.Lintner (1960), p.184.

⁵S.P.Dobrovolsky (1953), p.11 and J.Lintner pp.180-181.

Dobrovolsky explained the behaviour of profit retention.

A pioneering work in the field was done by Tinbergen⁶. He estimated a functional relationship between dollar amounts of dividends (D^1_t), current corporate net income (Y^1_t) and corporate net income in the preceding year (Y^1_{t-1}), and corporate surplus at the end of the preceding year (S^1_{t-1}). Using aggregate data for all American corporations for the period 1914-32, he estimated the following regression equation.

$$D^1_t = 0.151Y^1_t + 0.083Y^1_{t-1} + 0.075S^1_{t-1} \dots\dots\dots(1)$$

Dobrovolsky transformed the above equation (1) into the following on the basis of the relationship that dividends equal to the differences between current net income and current retained profit.

$$R^1_t = Y^1_t - 0.151Y^1_t - 0.083Y^1_{t-1} - 0.075S^1_{t-1} \dots\dots\dots(2)$$

$$= 0.849Y^1_t - 0.083Y^1_{t-1} - 0.075S^1_{t-1} \dots\dots\dots(2-a)$$

Where R^1 is retained profit in dollar amounts and other variables are as in equation (1). Equation (2-a) indicates that retained profit varies directly with current net income and inversely with preceding year's income and surplus.

Using the same variables as used by Tinbergen, Dobrovolsky obtained the following regression equation for the large American corporations for the period 1923-43.⁷

⁶Jan Tinbergen (1939), p.115.

⁷ S.P.Dobrovolsky (1951), p.39.

$$R^1_t = -23.4 + 0.72Y^1_t - 0.07Y^1_{t-1} - 0.07S^1_{t-1} \dots\dots\dots(3)$$

(+/- 0.07) (+/- 0.08) (+/- 0.38)

The figures in brackets represent standard errors.

Dobrovolsky used rates instead of absolute dollar amounts for his variables by expressing each one of them as a percentage of average net-worth and estimated another equation.

$$R_t = -4.51 + 0.79Y_t - 0.02Y_{t-1} - 0.03S_t \dots\dots\dots(4)$$

(+/-0.07) (+/- 0.06) (+/-0.07)

The figures in brackets represent standard errors.

Dobrovolsky developed another equation which included the preceding year's dividend payments and growth of operating assets (i.e., all assets other than cash and marketable securities) in addition to net income as the determining variables of retained profit. All the variables were taken in rates. Dobrovolsky stated that income retention depended largely on the rate of return on capital than on the absolute amount of profit, and therefore, the rates are the variables to be correlated. He also mentioned that it would facilitate the comparison of results for large and small corporations implying that the effects of the size of firms would be normalised by using the rates⁸. The equation is as under:

$$R_t = a + b_1Y_t - b_2D_{t-1} + b_3E_t + U_t \dots\dots\dots(5)$$

Retained profit, net income and dividends were taken as percentages to average net-worth. Change in operating assets as a

⁸The use of rates would also solve our problem of discontinuity in the sample. As mentioned in the Appendix on Data Source, RBI changes its sample size every five years.

percentages of stock of operating assets at the beginning of the year was taken as the proxy for expansion.

The following regression equation was obtained for the large manufacturing companies of USA for the period 1916-43.

$$R_t = -1.42 + 0.70Y_t - 0.35D_{t-1} + 0.11E_t \dots\dots\dots(5-a)$$

(+/-0.05) (+/-0.11) (+/-0.05)

The figures in brackets represent standard errors.

Thus, retained profit was found to be positively related to net income and negatively to lagged dividend. Net income appeared to be the most important factor in determining the level of retained profit. Dividend requirements, as measured by preceding year's rate of dividend appeared to have a considerable effect on income retention. At given levels of net income, retentions were higher or lower depending on whether dividend disbursements were lower or higher in the preceding year. Expansion of operating assets also had a positive relationship with current retentions and other things being equal, retentions were greater in the years in which the rate of operating assets was higher.

We have mentioned about the two empirical studies on corporate savings in India in our review of literature in Chapter I. Rao and Vivekananda in their study on determinants of corporate saving behaviour in India, attempted to include various variables for expansion, change in fixed assets, change in investment of plant and machinery, depreciation and various proxies for liquidity in addition to retained profit and

dividend⁹. They estimated alternative equations for different proxies of expansion and liquidity¹⁰. In all the equations, retained profit was mostly determined by net income (profit after tax) and dividend of the current year. The relationship of retained profit, as expected, was negative with dividend and positive with net income. The various proxies of expansion and liquidity also appeared to have positive impact on retention of profit.

Braj Kishor in his study¹¹ estimated the functional relation between retained profit, net income, lagged dividend and net expansion in the framework as developed by Dobrovolsky. His estimate gave the following result.

$$R_t = 0.26 + 0.51Y_t - 0.99D_{t-1} + 0.34E_t$$

(0.23) (0.45) (0.16) (0.16)

Adjusted R² = 0.695 D-W Statistic = 1.67

The figures in brackets represent standard errors.

He found that significant relationships existed between retained profit and the independent variables. The strongest relationship was that of lagged dividend in the inverse direction. Net income emerged as the next important variable influencing retentions positively. Expansion need turned out to be a relatively weaker explanatory variable with a smaller coefficient.

⁹V.G.Rao and M.Vivekananda (1980), pp.39-40.

¹⁰They estimated 12 alternative equations. For sake of brevity, their results are not reported here.

¹¹Braj Kishor (1980), pp.199-200.

Model Specification:

As already stated, the RBI company finance studies data relating to medium and large public limited companies over the period 1961-62 to 1985-86 are used for our analysis. We have tried to estimate the functional relationship between retained profit, profit after tax, dividends and net expansion by using the model of Dobrovolsky (equation-5). The only exception relates to definition of net expansion. Net expansion in our study has been taken as change in operating capital (change in net fixed assets + change in inventory) as percentage of stock of operating capital at the beginning of the year¹². We have taken the operating capital (which excludes depreciation) as they help in real capital formation and expansion. Thus financial asset accumulation has been kept out of the purview of our study assuming that corporate savings is used for that purpose only in rare occasions¹³. Retained profit, profit after tax and dividends are taken in percentages to net-worth. The equation is of the following form.

$$R_t = a + b_1 Y_t - b_2 D_{t-1} + E_t + U_t$$

R_t = Current Year Retained Profit as percentage of current year net worth.

¹²According to Dobrovolsky, operating asset implies all assets other than cash and marketable securities.

¹³When a company retains Re. one of income, its total assets will be necessarily greater by exactly Re. one, other things remaining equal. If the Re. one is held in cash or invested in securities, this may be due to reserve rather than expansion requirements. On the other hand, if the Re. one is invested on operating capital, i.e., net fixed assets or inventory, there is justification for assuming that the expansion motive has been at work.

Y_t = Current Year Net Income as percentage of current year net worth.

D_{t-1} = Preceding year's dividends as percentage of preceding years' net-worth.

E_t = Change in operating capital in current year, as a percentage of stock of operating capital at the beginning of the year¹⁴.

U_t = Error term

The equation is estimated by OLS for the aggregate corporate sector as well as for eleven industry-groups i.e., sugar, cotton textiles, transport equipments, electrical machinery, apparatus and appliances etc, machinery other than transport and electricals, foundries and engineering work shops, ferrous and non-ferrous metal products, engineering (total), medicines and pharmaceutical preparations, chemicals (total) and rubber and rubber products. They represent segments of consumer goods industries, capital goods industries and intermediate goods industries.

Regression Result

The estimated relationship for the **aggregate corporate sector** is as follows:

$$R_t = 0.016 + 0.937Y_t - 0.688D_{t-1} + 0.063E_t$$

(3.131) (30.729) (-7.033) (4.540)

Adjusted R^2 = 0.988 Durbin - Watson Statistic = 1.707

The figures in brackets are t-statistics.

All the coefficients are significant at 1% level.

¹⁴The change is taken from the same sample series of the over-lapping years.

The results as derived above for the corporate sector as a whole show that net income is the most important force which determine retention of profit. As we have already mentioned, net income is the most important conditioning factor for any stream of savings. In the case of corporate savings also the same rule holds good. Lagged dividend, which is used here as a surrogate for the current dividend requirements on the assumption that managements pursue a stable dividend policy and averse to change it abruptly and frequently is the next important force, though related to retentions in an inverse direction. The positive and significant sign of the expansion co-efficient indicates that the presence of investment demand induces corporations to save more. Further, it shows that investment demand and dividend disbursements act as competing demands. However, the impact of investment demand appears to have lesser impact on corporate savings as compared to net income and lagged dividend.

The results derived for the eleven industry-groups are set out in Table 5.2. The problem of auto-correlation has been circumvented by Prais-Winsten transformation/Cochrane-Orcutt correction (first-order autoregressive). However, the results with and without corrections are reported. The analysis is done by using the corrected fits. It is evident from the Table that the least squares estimates explain adequately the functional relationships between the dependent variable and independent variables for all industries except in the case of chemical industries(total). The low figure of adjusted R^2 for the chemical industries point to the fact that some variables external to the model could be responsible for determining the level of profit

Table 5.2

Determinants of Corporate Savings (Retained Profits)

| Industry | Constant | PAT _t /NW _t | DIV _{t-1} /NW _{t-1} | Expansion | Adjusted R ² | DW Statistic |
|---|-----------------------|-----------------------------------|---------------------------------------|---------------------|-------------------------|--------------|
| 1. Sugar | -0.014** (-2.802) | 0.977* (60.533) | -0.650* (-5.786) | 0.014*** (1.926) | 0.994 | 1.788 |
| 2. Cotton | | | | | | |
| Textiles | -0.021* (-2.931) | 0.979* (60.456) | -0.598* (-3.942) | 0.020** (2.735) | 0.996 | 1.439 |
| ,, PWT | -0.010** (-2.284) | 0.965* (58.708) | -0.730* (-5.789) | 0.026** (2.392) | 0.996 | 1.659 |
| 3. Transport | | | | | | |
| Equipments | -0.007 (-1.497) | 0.952* (46.260) | -0.765* (-9.086) | 0.010 (1.429) | 0.994 | 1.370 |
| ,, PWT | -0.003 (-1.231) | 0.954* (45.623) | -0.815* (-13.118) | 0.009 (1.359) | 0.993 | 1.461 |
| 4. Electrical | | | | | | |
| Machinery | -0.013** (-2.492) | 0.859* (27.820) | -0.541* (-4.666) | 0.032* (4.535) | 0.983 | 1.635 |
| 5. Machinery | | | | | | |
| other than (3) and (4) | -0.013** (-2.672) | 0.891* (29.368) | -0.542* (-4.092) | 0.019* (3.228) | 0.984 | 1.997 |
| 6. Foundries & Engineering Workshops | -0.010*** (-1.774) | 0.933* (46.979) | -0.651* (-5.332) | 0.015 (0.972) | 0.991 | 1.514 |
| 7. Ferrous and non-ferrous metal prods. | -0.022** (-2.502) | 0.804* (16.804) | -0.399** (-2.140) | 0.018 (0.698) | 0.935 | 1.324 |
| ,, Ar(1) | -0.035** (-2.024) | 0.861* (16.086) | -0.039 (-0.098) | 0.002 (0.098) | 0.948 | 1.673 |
| 8. Engineering (Total) | -0.010** (-2.315) | 0.887* (31.968) | -0.640* (-6.449) | 0.034* (4.380) | 0.987 | 1.704 |
| 9. Medicines and Pharma. preparations | -0.023** (-2.319) | 0.621* (7.031) | -0.054 (-0.339) | 0.033 (1.633) | 0.820 | 1.812 |
| 10. Chemicals (Total) | 0.054** (2.488) | 0.332*** (1.892) | -0.551* (-4.364) | 0.037 (0.912) | 0.405 | 1.796 |
| 11. Rubber and Rubber prods. | -0.019** (-2.408) | 0.829* (24.824) | -0.452* (-3.647) | 0.020* (2.974) | 0.963 | 2.263 |

* = Significant at 1% level, ** = Significant at 5% level, *** = Significant at 10% level.

Figures in brackets are t-statistics.

PWT = Prais-Winsten Transformation.

Ar(1) = Cochrane-Orcutt Auto-regressive Correction of first order.

retention.

Net income tax seems to be the most important variable for all the 11 industries/industry-groups in explaining their retained profit. It is significant for all the industries. However, in case of chemicals (total), it is significant only at 10% level and the negative force of one year lagged dividend appears to be stronger than the positive force of net income in determining the level of corporate savings.

Dividend as expected, was negatively related to retained profit for all the industries. It was significant for all the industries excepting ferrous and non-ferrous metal products and medicines and pharmaceutical preparations.

Net expansion was positively related to retained profit for all the industries but turned out to be significant for six industry-groups only, i.e., sugar, cotton textiles, electrical machinery, machinery other than transport and electricals, engineering(total) and rubber and rubber products. Thus, investment demand appeared to induce higher retention by the corporate entities.

Conclusions

The above analysis brings out the relationship between retained profit, net income, one year lagged dividends, and net expansion. However, the complexities of this functional relationship can only be brought out most accurately within the framework of such analysis which explicitly takes account of

factors such as risk, uncertainty, imperfect knowledge of managerial preferences etc. To that extent, the regression results can not be interpreted literally but could be used to find out suggestive evidences. Similarly, the limitations of ordinary least square estimates should be kept in mind while drawing the inferences. The combined figures on profit after tax relate to both the profit earning and loss making companies. Therefore, analysis based on the aggregate profit may not be very relevant¹⁵. The movements in opposite directions may affect the analysis to some extent.

However, the results obtained by us indicate that the retained profit is positively related to net income and expansion requirements and negatively to dividends. Net income turned out to be the most important determinant of retained profit for the aggregate corporate sector as well as for the industry-groups. One year lagged dividend was negatively related to retained profit for the aggregate corporate sector as well as for the above industries. Since, dividends' share in net income is primary, retained profit follows as a residual. The high dependence of savings on net income indicates that tax policy does exert significant influence on financing decisions¹⁶. Given the tendency to follow a target dividend pay out policy and non-shiftable nature of the corporate tax burden, a policy aimed at reducing corporate tax burden may help in boosting corporate savings. Expansion also exerted positive influence on retained profit. The result of the aggregate corporate sector as well as

¹⁵RBI Bulletin, January 1974, p.33.

¹⁶V.G.Rao and M.Vivekananda (1980) p.46.

six industries i.e., sugar, cotton textiles, electrical machinery, machinery other than transport and electricals, engineering (total) and rubber and rubber products indicated that expansion induced them to save more. Thus investment stimulating policies may provide a boosting to corporate savings.

Chapter VI

DETERMINANTS OF CORPORATE BORROWINGS - A STATISTICAL ANALYSIS

The last chapter explored the determinants of corporate savings which is a critical component of the internal sources of corporate financing. This chapter makes an effort to find out the determinants of corporate borrowings, which constitute the major component of the external finance in the corporate sector. The analysis assumes importance as the "borrowing orientation" of the private corporate sector as revealed by our study, has significantly increased in India, particularly since mid-seventies.

Determinants of Corporate Borrowings

As stated earlier, demand for external finance arises primarily an account of constraints imposed by internal resources. Thus, demand for external finance is positively related with investment needs and negatively related with retention of profit. In addition to investment expenditures and internal flows, cost of finance may be a determining factor of demand for external finance¹. However, in a country like India, where interest rate is administered one, availability of finance rather than cost of finance turns out to be the more decisive factor.

In terms of Kaleckian principle of increasing risk, the extent to which a firm can or will borrow is governed by the

¹K.Krishnamurty and D.U.Sastry (1975), p.78.

amount of its indebtedness, as the marginal risk rises with the increase in outstanding debt in relation to its own capital².

Due to the above factor the flow of debt may be negatively related to the level of outstanding debt. However, when outstanding debt is interpreted as representing habit persistence or credit availability, it can have a positive influence on demand for external funds because firms which are likely to borrow are those which have done so in the past³.

Our analysis of borrowing behaviour has the objective of linking financial and investment decisions to examine the interdependence between them.

Data and Measurement

The RBI company finance data posed some problems while analysing the behaviour of external financing of the private corporate sector. The problems arose due to the facts that the data are reported in current prices and that there is discontinuity in the data as the RBI sample size changes every five years. Another problem arose because of the discrepancy between published data in the statements on sources and uses of funds and the flow data derived from balance sheet⁴.

In order to eliminate, to the extent possible, the

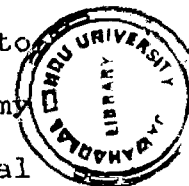
²M.Kalecki (1937), p.442.

³V.K.Sastry (1966) Dividends, Investment and External Financing Behaviour of the Corporate Sector in India, Unpublished doctoral dissertation, University of Pennsylvania, quoted by K.Krishnamurty and D.U.Sastry (1975), p.78.

⁴It is reported that though the statement on sources and uses of funds is derived from balance sheet, the figures are adjusted for revaluation, interest capitalisation, etc., whenever necessary.

effect of inflation, wholesale price index of machinery and equipment (1970-71 = 100) has been used as the deflator in order to express the financial variables. i.e., investment in fixed investment and inventory, flow of borrowings and retained profit in terms of purchasing power of investment goods.

The problem of discontinuity in sample has been dealt with by several methods by various researchers. The age old method is to blow up the series by the sample coverage expressed in terms of paid-up-capital. Earlier the blow up factor used to be reported in company finance studies. However, this information is not made available after 1970-71. An alternative procedure to account for differences in coverage is to introduce dummy variables in the equation⁵. This, however, may introduce unequal error variance. We have attempted a novel method to deal with the discontinuity problem. The per firm values for the financial variables have been worked out for the five series of RBI sample. At the aggregate level, the data have been divided by the total sample size as covered in different series. Similarly, industry-wise per firm values are worked out in respect of the eleven industry-groups as covered in Chapter V⁶.



The third problem was resolved by generating the flow data for all the relevant variables from the balance sheet.

Variables Considered: Investment in fixed assets and inventory

⁵V.G. Rao and M. Vivekananda (1980), p.42.

⁶Taking the heterogenous nature of industries covered by RBI sample, this approach may not be very accurate for aggregate corporate sector. But at the industry level, it seems to be more appropriate.

accumulation, level of retained profit in the current year and the level of borrowings at the end of the previous year were considered as the variables for determining the flow of the borrowings during the current period. First, the estimation was made for the aggregate corporate sector and then extended to the eleven industry-groups.

The functional equation is of the following form:

$$\Delta TB = f_1 (\Delta K, \Delta INV, RP, TB_{t-1}) \quad (1)$$

Where,

ΔTB = Change of Total Borrowings in year t

ΔK = Change of Net Fixed Investment in year t

ΔINV = Change of Inventory Investment in year t

RP = Retained Profit in year t

TB_{t-1} = Total Borrowings at the end of year t-1

A priori, the flow of borrowings was expected to be positively related to investment needs and negatively to retained profits. In terms of Kaleckian principle of increasing marginal risk, flow of borrowings was expected to be negatively related to preceding year's level of borrowing.

Auto correlation is a problem in any econometric study of time series data. We have used Cochrane-Orcutt method of first-order autoregressive (ar1) for its correction. The results with and without corrections are reported. The results are interpreted by taking the corrected fits.

Determinants of Borrowings - Aggregate Corporate Sector

Regression Result

$$1 \text{ (a) } \Delta \text{ TB} = 0.124^* + 0.830^* \Delta \text{ K} + 0.236 \Delta \text{ INV} - 0.087 \text{ RP} \\ (3.507) \quad (10.304) \quad (1.365) \quad (0.203) \\ - 0.084^* \text{TB}_{t-1} \\ (-3.021)$$

Adjusted R² = 0.934 DW Statistic = 1.020

$$1 \text{ (b) } \Delta \text{ TB Ar}(1) = 0.195^{**} + 0.832^* \Delta \text{ K} + 0.326^{***} \Delta \text{ INV} - 0.455 \text{ RP} \\ (2.461) \quad (8.097) \quad (2.009) \quad (-0.891) \\ - 0.121^{**} \text{TB}_{t-1} \\ (-2.450)$$

Adjusted R² = 0.952 DW Statistic = 2.014

* Significant at 1% level, ** Significant at 5% level, and *** Significant at 10% level. Figures in brackets are t-Statistics. Ar(1) refers to results obtained after correction through auto-regressive of first order.

As expected, $\Delta \text{ K}$ and $\Delta \text{ INV}$ were positively related to the flow of total borrowings. As per the Kaleckian principle of increasing marginal risk of debt, flow of borrowing was negatively related to the level of borrowings in previous year. Retained profit had the expected negative coefficient, but it was not significant.

Determinants of Total Borrowings: Industry-wise

Equation (1) has been estimated for eleven industry-groups. The results are presented in Table 6.1 Corrected autoregressive (Ar1) results are presented along with originally estimated results for the industries where DW-statistics indicate to some degree of auto-correlation.

Table 6.1 Determinants of Total Borrowings

| Industry | Constant | ΔK | ΔINV | RP | TB_{t-1} | Adjusted R^2 | DW statistic |
|---|-------------------|--------------------|---------------------|-----------------------|-----------------------|----------------|--------------|
| 1.Sugar | 0.886 (1.517) | 0.598 (1.566) | 0.769* (23.214) | -1.131* (-4.659) | -0.069*** (-2.028) | 0.978 | 2.581 |
| ,, Ar(1) | 0.880 (1.797) | 0.330 (0.998) | 0.779* (27.387) | -1.033* (-5.073) | -0.055** (-2.108) | 0.979 | 2.214 |
| 2.Cotton Textiles | 0.108 (0.999) | 0.764* (4.622) | 0.859** (2.374) | -0.520 (-1.572) | -0.083 (-1.182) | 0.710 | 2.897 |
| ,, Ar(1) | 0.173* (3.183) | 0.796* (8.995) | 0.662** (2.862) | -0.540* (-3.034) | -0.112* (-2.914) | 0.843 | 1.783 |
| 3.Transport equipment | -0.052 (0.192) | 0.803* (4.129) | 0.521* (4.178) | -0.405 (-0.947) | -0.013 (-0.180) | 0.714 | 2.881 |
| 4.Electrical machinery | -0.050 (0.549) | 0.869* (4.746) | 0.074 (0.931) | 0.257 (-0.680) | -0.037 (-0.710) | 0.629 | 2.084 |
| 5.Machinery other than (3) and (4) | 0.062 (0.616) | 0.640* (4.670) | 0.314* (3.990) | -0.045 (-0.139) | -0.069 (-0.368) | 0.860 | 0.821 |
| ,, Ar(1) | -0.035 (0.227) | 0.609* (2.907) | 0.338* (5.429) | 0.376 (1.012) | 0.016 (0.158) | 0.910 | 1.764 |
| 6.Foundries and Engg. workshops | 0.103 (1.537) | 0.424** (2.679) | 0.223 (0.931) | 0.001 (0.003) | -0.032 (-0.614) | 0.148 | 1.593 |
| ,, Ar(1) | 0.102 (1.688) | 0.452** (2.571) | 0.329 (1.442) | -0.162 (-0.403) | -0.094 (-1.091) | 0.176 | 2.015 |
| 7.Ferrous & non-ferrous metal prod. | 0.127 (1.435) | 1.076* (3.716) | 0.690* (3.295) | -0.669 (-1.175) | -0.101*** (-1.797) | 0.606 | 2.286 |
| 8.Engineering (Total) | 0.060 (0.831) | 0.747* (6.080) | 0.426* (3.719) | 0.226 (0.583) | -0.030 (-0.663) | 0.829 | 1.165 |
| ,, Ar(1) | 0.102 (0.981) | 0.876* (3.772) | 0.506* (4.443) | -0.546 (-1.043) | 0.970 (0.872) | 0.860 | 1.769 |
| 9.Medicine & pharma. preparation | -0.042 (0.716) | 0.699** (2.300) | 0.011* (4.070) | -0.261 (-0.503) | -0.014 (-0.269) | 0.506 | 2.219 |
| 10.Chemicals (Total) | 0.093 (1.456) | 0.598* (3.976) | 0.380*** (1.766) | -0.468 (-0.970) | -0.017 (-0.249) | 0.686 | 1.361 |
| ,, Ar(1) | 0.151 (0.751) | 0.393** (2.706) | 0.329** (1.786) | -0.359 (-0.627) | -0.026 (-0.211) | 0.723 | 1.974 |
| 11.Rubber & rubber products | 0.127 (1.545) | 0.720* (3.610) | 0.594* (3.239) | -1.084*** (-2.059) | -0.095 (-1.358) | 0.559 | 2.054 |

* = Significant at 1 % level, ** = significant at 5 % level,
*** = significant at 10 % level. Figures in brackets relate to 't' statistic.

The table shows that the variables considered by us could explain adequately the flow of total borrowings for all the industry-groups excepting foundries and engineering work-shops. The flow of total borrowing was influenced by both fixed investment and inventory investment in the industries like cotton textiles, transport equipments, machineries other than transport and electricals, ferrous and non-ferrous metals, engineering (total), medicines and pharmaceuticals, chemicals (total) and rubber and rubber products. The influence of fixed investment appeared to be relatively larger in case of industries like cotton textiles, transport equipments, machinery other than transport and electricals, ferrous and non-ferrous metal products engineering (total), chemicals (total) and rubber and rubber products whereas the impact inventory investment appeared to be relatively greater in medicine and pharmaceutical preparations. Inventory investment alone was significant in sugar while fixed investment alone was significant in electrical machinery.

Thus investment expenditures - fixed and/or inventory, influenced the flow of borrowings in all the industries. However, fixed investment appeared to influence more the flow of borrowings. It is understandable that sugar industry requires most of the funds for inventory purposes. In case of pharmaceutical preparations also inventory investment constitute a major portion of asset expansion. For the rest of the industries, net fixed investment constituted the major part of the net capital formation. A close look at the statements on sources and uses of funds also corroborated this finding. So inventory investment alone turned out to be significant in sugar

and its impact appeared to be relatively greater in medicine and pharmaceutical preparations. For other industries, as expected, net fixed investment had larger impact on the flow of borrowings.

The impact of retained earnings on the flow of borrowings was negative for all industries excepting electrical machinery, machinery other than transport and electricals. But it was significant for sugar, cotton textiles, and rubber and rubber products only. A look at the retention ratios also indicated to low retentions during most of the years for those industries. This would have been a limiting factor for their expansion for which they would have gone for larger borrowings.

The flow of total borrowings, as anticipated by us was negatively related to the level of debt at the end of the previous year for all industries excepting transport equipments, electrical machinery and machinery other than transport and electricals. However the relationship was significant only for sugar, cotton textiles and ferrous and non-ferrous metal products. Thus the principle of increasing risk was not supported by the other industries. This implied that the stock of debt did not have restraining influence on the flow debt for most of the industries covered by us.

Limitations of the Analysis

The results of the study based on our specifications are subject to some limitations. As usual, the limitations of OLS should be kept in mind while drawing inferences. In this study, it has been assumed that depreciation accruals take care of wear

and tear and so borrowings/retained profits are channelised for net asset expansion. However, there are divergent views on the issue. In the words of Dhrymes and Kurz " there are good reasons to believe that depreciation does not accurately measure the 'using of capital' ". According to Dobrovolsky "despite possible errors" data on net expansion and net corporate savings must be used when comparisons are made between the relative importance of internal and external financing as alternative methods⁸.

In our study only physical expansion in terms of fixed investment and inventory investment have been covered. The financial asset expansion due to liquidity requirement has therefore not been studied.

A common deflator i.e., price index for machinery and transport equipment(1970-71 = 100) has been used for expressing all the financial variables in terms of purchasing power of investment goods. This is an approximation. However the problem is very serious as it is difficult to get suitable price deflator for various financial variables of the different industries⁹.

Summary of Findings

Despite the above limitations, the results of regression analysis may be taken to indicate the functional relationships between the financial and investment. The analysis of the aggregate corporate sector indicated that the flow of

⁷P.J. Dhrymes and M. Kurz (1976), p.435.

⁸Dobrovolsky (1951), p.11.

⁹V.V.Divatia and K.Shankar(1979),pp.124-125.

borrowings was primarily determined by the need for expansion in terms of net fixed assets and inventory. However, the impact of net fixed assets appeared to be more than inventory. The stock of borrowing of the previous year had a restraining effect on the current flow of borrowings. Retained profit though negatively related to the level of borrowings, was not significant.

Industry-wise analysis revealed that for most of them, flow of borrowings was influenced by both fixed and inventory investment. For capital intensive industries like transport equipment, machinery other than transport and electricals, ferrous and non-ferrous metal products, engineering (total) and chemicals (total) the impact of fixed investment appeared to be more than that of inventory investment. Fixed investment alone was significant for electrical machinery. For the agro-based sugar industry, inventory alone turned out to be significant.

Chapter VII

CONCLUDING OBSERVATIONS

In concluding this study on financing of the private corporate sector in India for the period 1961-62 to 1985-86, we note some structural changes marked by a cyclical trend in the composition of internal versus external sources in the basket of total sources of funds. The study identified three distinct phases: (i) 1961-62 to 1967-68 - a declining phase of the proportion of internal sources, (ii) 1968-69 to 1973-74 - steadily rising phase of the proportion of internal sources and (iii) 1974-75 onwards - a phase of declining share of internal and rising proportion of external sources.

Such a trend in the financial-mix was found related to the "cyclical" growth pattern of the industrial economy during the period under study. During the period of stagnation since mid-sixties the proportion of internal sources was high, the funds mostly coming from depreciation and investment allowance reserves. During the period of high growth rate a relatively higher proportion of external sources was used, the funds coming in the form of borrowings. Also, it emerged that borrowings were positively related to capital formation in terms of fixed assets as well as inventory. Thus, an environment propitious to economic growth tended to favour the use of external funds by the private corporate sector. The rationale of this pattern of behaviour was this: It would not have been possible to achieve a high rate of output growth with the resources mobilised from internal sources; a higher proportion of external sources was, therefore, resorted

to by the private corporate sector. Thus, the declining share of internal sources of funds since mid-seventies should be visualised in the context of macro-economic dynamics. The policy changes towards "liberalisation" in the eighties provided the impetus for industrial growth, which in turn necessitated the use of higher proportion of external sources. We would, rather say, that the emerging financing-mix of internal versus external sources of funds in the corporate sector was a natural concomitant of the process of development of a growing economy.

The study also highlighted that changes in the components of internal as well as external sources were more important than the mix between the two. The important components of internal sources viz., depreciation provision and investment allowance reserves were fiscal related sources. The fiscal incentive in terms of a steep hike in the rate of depreciation would render depreciation allowances an increasingly important instrument for internal generation of funds. It could, therefore, be reasonably expected that the enhancement of depreciation allowance in 1986-87 would accelerate the pace of replacement of old plant and machinery and act as a catalytic agent for induction of modern technology in the industrial sector. This would reduce the demand for external resources and tilt the capital structure in favour of internal sources.

Yet, another significant component of internal sources viz., retained profit was also linked to the fiscal policy. It was found that net expansion of physical assets had positive effects on corporate savings as testified by comparatively higher

retention by the corporate sector since mid-seventies as compared to the earlier period. In the regression analysis, however, profit after tax turned out to be the major determinant of the corporate savings, implying that a lower corporate tax would be able to induce higher corporate savings. Thus, the study could infer that fiscal policies played a crucial role in determining the level of internal sources of funds for the corporate sector.

The three main components of external finance were borrowings, trade credit and equity (new issues). Borrowings constituted the major component of the external source though, its share fluctuated in alternate directions over the period. Trade credit and other liabilities emerged as an important source during the seventies and eighties. But, equity shares barely provided 2 to 3 per cent of total funds during the seventies and the eighties. Though the capital market in India has come of age, the equity cult is still to come to blossom. On the whole, what the study identified as the characteristic feature of the capital structure of the private corporate sector in India, is the "borrowing-orientation", since mid-seventies. In tune with the increasing "borrowing orientation" the interest cost as a proportion of profit before tax also escalated and crossed the 50 percent level in the eighties. And, the higher interest burden affected the net profitability of the companies. The study led to signal a warning: a mis-match between cash inflows and outflows could lead to insolvency and possible bankruptcy of the companies, whose capital structure is heavily loaded with borrowings.

The study showed that the pattern of financing marked by higher level of borrowing coupled with low level of equity in the capital structure led to a significant rise in the debt-equity ratio over time. Further, the proportion of borrowings in total sources and the rate of inflation almost moved in identical directions. It implied that management of macro-economic policies to keep the rate of inflation at a reasonable rate would also induce the corporate sector to go for less of borrowings.

The lower equity vis-a-vis debt observed in the capital structure of the private corporate sector was linked with the fiscal discrimination between the interest costs and dividend payment for corporate tax purposes. From companies' point of view, the taxation on dividend enhanced the cost of equity and from investors' point of view, there was the complex problem of double taxation. The findings of the study lend a sense of urgency to consider the issue of abolition/rationalisation of dividend taxation which has been examined by various committees [e.g., the Bhoothalingam Committee (1968), Jha Committee (1987) and Rangarajan Committee (1982)].

The study also noted that the composition of borrowings went through a radical transformation marked by the decline of the proportion of bank borrowings both in total sources and total borrowings over time. This was due to the reorientation of credit deployment policy after the bank nationalisation and implementation of Tondon Committee's norms relating to the level of inventory holding's and maintenance of favourable current ratio after 1975. As a result, trade credit emerged as a major

source of finance since mid-seventies in order to finance the inventory gap. Particularly, trade credit constituted a major source of funds for the industries like sugar, tobacco and rubber and rubber products in which raw material supply would have taken place in credit terms. Our study suggested that the massive utilisation of funds through trade credit would need to be watched closely as it could reduce the impact of restrictive credit policies.

The study highlighted the increasing proportion of funds from term lending institutions since mid-seventies and its beneficial effect on the growth of the corporate sector. In particular, the corporate sector mobilised massive amount of resources through debentures and public deposits during 1981-86. The relaxation of capital control norms relating to debentures and raising of interest rates applicable to both the instruments would have induced the investing public to invest in those instruments. At the very same time, they were cheaper sources of funds for the corporate sector as the rates of interest charged to them were lower than commercial bank lending rates. Our analysis indicated that the structure of interest rates for different sources/instruments of external finance affected the preference pattern of investing public as well as the corporate sector. Thus, interest rate policy can be effectively used for promoting any specific source/instrument of external funds.

The resources raised by the private corporate sector in India from foreign sources was found to be marginal and was mainly confined to direct foreign investment. Indeed, some

public sector undertakings and financial institutions directly did tap the foreign capital market by way of non-convertible issues. But the private corporate companies did very little to raise capital in the international capital market. A selective policy of allowing the reputed private sector companies, who have established a name and track record for themselves at home, to tap the capital markets abroad by offering bonds, convertible debentures or equity appeared desirable.

In terms of general conclusion, we may mention that the private corporate sector in India operates under the institutional framework of government controls and regulations. These control instruments not only guide and direct the course of industrial development but also to a large extent, determine the financing pattern of the corporate sector. In particular, fiscal policies (e.g., tax rates and tax concessions), monetary policies (e.g., selective credit controls and interest rates) and capital control rules, can be used to influence changes in the capital structure of the private corporate sector in desirable directions. Yet, as documented in our study, the capital structure of the Indian corporate sector has become imbalanced, and tilted towards more of borrowings and less of equity. It seems, restructuring of policy instruments particularly, the fiscal and monetary policies that will check the trend of "borrowing" orientation and will encourage greater reliance on internal sources and equity by the private corporate sector, on the lines indicated in our study is called for.

APPENDIX

DATA SOURCE, CONCEPTS AND METHODOLOGY

A. Sources of Data

The primary source of data for this study has been the company finance studies which are published on a continuous basis by the Reserve Bank of India (RBI) in its monthly Bulletin under the headings "Finances of medium and large public limited companies". These data pertain to non-government and non-financial public limited companies. They are published in compendium form by the RBI in its publication entitled "Financial Statistics of Joint Stock Companies in India 1960-61 to 1970-71" and "Financial Statistics of Joint Stock Companies in India 1970-71 to 1974-75". The necessary information for the above period are culled out from these two publications and the data for the subsequent period are compiled from the various issues of Reserve Bank of India Bulletin. The relevant data for the period 1981-82 to 1985-86 are obtained from the Department of Statistical Analysis and Computer Services (DESACS) of the RBI. This has been necessitated due to two factors : (i) the detail break-ups for individual industries/industry-groups are not published for the above period and (ii) some small companies which have been accommodated in the series since 1982-83, make the data not strictly comparable with the earlier period. Unpublished data on public deposits with the medium and large public limited companies from 1965-66 to 1980-81 and data on capital raised and debentures issued during the year by these companies from 1975-76 to 1985-86 are also obtained from DESACS, RBI.

According to RBI, 'criterion for selection of the companies for different studies is their amount of paid-up-capital. The main objective is to have maximum coverage and to include as many representative units as possible of all industries, keeping the work load within manageable limits. Companies in the construction stage, defunct companies, promotional/developmental companies and companies limited by guarantee are not included in the studies.' RBI changes the coverage of sample every five years. For sake of comparison, data are also reported for overlapping years of the adjoining series. Thus the sample covered 1,333 companies during the period 1960-61 to 1965-66; 1,501 companies during 1965-66 to 1970-71; 1,650 companies during 1970-71 to 1975-76; 1,720 companies during 1975-76 to 1980-81. All the above data relate to medium and large public limited companies¹. Comparable data obtained from DESACS, RBI for the period 1980-81 to 1985-86 have a coverage of 1,427 companies. The data relate to July-June for the series 1960-61 to 1965-66 and to April-March in the subsequent series.

The RBI company finance studies on "medium and large public limited companies" cover a substantial proportion of Public limited companies in terms of paid-up-capital and can be taken as representative of the private corporate sector of India.

¹companies with a paid-up-capital of Rs.5 lakhs or above.

Table - A.1

Coverage of Medium and Large Public Limited Companies in RBI Company Finance Studies
(Rs. Crores)

| Year | Total Private Corporate (Public Ltd + Private Ltd) | | Public Limited Companies (Total) | | RBI Sample of Medium & Large Public Limited Companies | | % of (4) to (2) | % of (5) to (3) | % of (6) to (2) | % of (7) to (3) | % of (8) to (4) | % of (9) to (5) |
|---------|--|--------|----------------------------------|--------|---|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Number | P-U-C | Number | P-U-C | Number | P-U-C | (2) | (3) | (2) | (3) | (4) | (5) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1961-61 | 24821 | 1389.4 | 6399 | 1093.3 | 1333 | 716 | 25.2 | 78.6 | 5.4 | 51.5 | 20.8 | 65.5 |
| 1966-67 | 27815 | 1762.9 | 6309 | 1401.8 | 1501 | 1173 | 23.4 | 79.5 | 5.6 | 66.5 | 23.8 | 83.7 |
| 1971-72 | 31915 | 2571.7 | 6703 | 2035.9 | 1650 | 1600 | 21.0 | 79.2 | 5.2 | 62.2 | 24.5 | 78.6 |
| 1976-77 | 45165 | 3705.2 | 7794 | 2808.0 | 1720 | 2030 | 17.6 | 75.8 | 3.8 | 54.8 | 22.1 | 72.3 |
| 1981-82 | 71508 | 4961.0 | 10169 | 3715.9 | 1427 | 2723 | 14.2 | 74.9 | 2.0 | 54.9 | 14.0 | 73.3 |
| 1985-86 | 121139 | 6659.0 | 15602 | 4903.8 | 1427 | 3432 | 12.9 | 73.6 | 1.18 | 51.5 | 9.1 | 70.0 |

P-U-C = Paid-up-capital

Sources: 1) Various issues of Company News and Notes, Ministry of Company Affairs, Govt. of India
2) Financial Statistics of Joint Stock Companies in India 1960-61 to 1970-71 and 1970-71 to 1974-75, RBI, Various RBI Monthly Bulletins. Data for 1981-82 to 1985-86 obtained from RBI.

A glance at Table A.1 makes it clear that the public limited companies constitute a significant proportion of the corporate sector (public + private) in terms of paid-up-capital which on an average ranged between 74 to 80 per cent, though in terms of number its share has secularly declined from 25 per cent in 1961-62 to 13 per cent in 1985-86. RBI sample on medium and large public limited companies also cover a substantial portion of the public limited companies in terms of paid-up-capital. The coverage has ranged between 66 per cent to 84 per cent during 1961-66 to 1985-86. Coverage in terms of number ranged between 9 per cent to 25 per cent. This implies that a significant number of public limited companies are small in nature. However, it is

the medium and large companies which play a dominating role in terms of production, resource mobilisation etc., in the industrial economy. While analysing the financing pattern of private corporate sector in India, it is, therefore, in order to take RBI sample of medium and large public limited companies as a representative sample².

Table A.2 gives ideas about the coverage of individual industry-groups in RBI sample on medium and large public limited companies. RBI has selectively chosen the sample and has taken into consideration the structural transformation of industries taking place in India over the period. Consequently, the number of industries in engineering and chemicals industry groups have been raised significantly in the sample keeping in tune with their expansion. Similarly the coverage of the companies under paper and paper products has increased overtime. Simultaneously, coverage of cotton textiles, tea plantation and sugar has been reduced.

The financial data on sample companies are reported by RBI in the form of: (i) statements on combined balance sheet of asset and liabilities, (ii) statements on sources and uses of funds and (iii) statements on combined income, value of production, expenditure and appropriation accounts. The balance sheet presents various components of assets and liabilities as at a point of

² The Reserve Bank of India studies on company finance are regarded as the core of the statistical infrastructure in the field of industrial finance. There is no other such comprehensive source of data available for the corporate sector in India. Though IDBI, IFCI and ICICI publish similar company finance studies, they include only the companies financed by them where as RBI company finance studies are sample studies.

Table - A.2

**Coverage of Individual Industry/Industry Group in RBI Sample on
Medium and Large Public Limited Companies**
(Number of Companies)

| Industry/Industry-Group | 1961-62 | 1966-67 | 1971-72 | 1976-77 | 1981-82 |
|--|---------------|---------------|---------------|---------------|---------------|
| | to 1965-66 | to 1970-71 | to 1975-76 | to 1980-81 | to 1985-86 |
| 1. Tea Plantations | 139 | 135 | 127 | 119 | 93 |
| 2. Sugar | 82 | 77 | 70 | 60 | 40 |
| 3. Tobacco | 5 | 5 | 6 | 7 | 5 |
| 4. Cotton Textiles | 256 | 261 | 249 | 241 | 164 |
| 5. Silk and Rayon Textiles | 11 | 16 | 18 | 14 | 12 |
| 6. Aluminium | 2 | 4 | 3 | 3 | 3 |
| 7. Engineering | 197 | 290 | 410 | 460 | 400 |
| of which: | | | | | |
| i. Transport Equipment | 31 | 44 | 49 | 56 | 62 |
| ii. Electrical Machinery, apparatus, etc., | 47 | 78 | 109 | 112 | 99 |
| iii. Machinery other than (i) and (ii) | 53 | 91 | 134 | 149 | 124 |
| iv. Foundries and engineering workshops | 27 | 18 | 45 | 72 | 63 |
| v. Ferrous/non-ferrous metal products | 29 | 59 | 74 | 71 | 53 |
| 8. Chemicals | 91 | 130 | 185 | 201 | 200 |
| of which: | | | | | |
| i. Medicines and pharmaceutical preparations | 32 | 39 | 50 | 52 | 51 |
| 9. Cement | 16 | 16 | 18 | 18 | 16 |
| 10. Rubber and rubber products | 8 | 13 | 20 | 19 | 24 |
| 11. Paper and paper products | 20 | 30 | 36 | 42 | 42 |
| 12. Electricity generation and supply | 30 | 32 | 20 | 10 | 9 |
| 13. Trading | 74 | 81 | 88 | 90 | 61 |
| TOTAL (including others) | 1333 | 1501 | 1650 | 1720 | 1427 |

Source: Various issues of RBI Monthly Bulletins, data for the period 1981-82 to 1985-86 obtained from RBI.

time. The increases/decreases in the various items of assets and liabilities during the year represent the uses and the sources of funds under the respective heads and as such this statement is compiled from the combined balance sheets of two consecutive years, with certain adjustments due to revaluation of foreign

currencies, etc. The statement on sources and uses of funds is intended to show the accretion of total funds of the companies and the assets in which these funds are invested during the year.

The analyses of trends and patterns of financing are mostly based on statements on sources and uses of funds. The statement on income and expenditure presents the combined income, value of production, expenditure and appropriation. These give in summary form the financial transactions of the companies during the year. These informations are used for the analysis of retained profit. The analysis of chapter VI is based on data derived from the statements on assets and liabilities (balance sheets). In addition to the RBI company finance studies which constitute the core sources of data for this study, various other RBI publications like Reports on Currency and Finance, Reports on Trends and Progress of Banking in India, Annual Reports and Monthly Bulletins have been consulted. The censuses on public limited companies 1971-72 and 1976-77 and Public Limited Companies in India 1980-82 - A Profile, RBI have been consulted for the analysis of size-wise differences in pattern of financing.

B. Concepts and Definition³:

The following items figure in the statements on assets as well as in the statement on sources of funds.

1. Paid-up-Capital: This item figures both in external as well as internal sources of finance. While internal sources include the

³The definitions are as per RBI's classification of various items in its company finance studies.

bonus share capital, external sources include net issues and premium on shares.

2. Reserves and Surplus:

(a) Capital Reserve: This item comprises capital reserves, profit/loss on sale of fixed assets and/or investments, profit realised on purchase of company's own debentures, profit on re-issue of forfeited shares, surplus arising on the acquisition of a subsidiary, capital redemption reserves and reserves arising out of revaluation of fixed assets.

(b) Development Rebate Reserve/Investment Allowance Reserve: Development reserve comprises all reserves set apart in terms of section 33 of the Income Tax Act, 1961. The investment allowance (Section 32 A) was introduced with effect from April 1, 1976 in lieu of the initial depreciation allowance admissible till March 31, 1976. It was allowed as a deduction from the business profits and was broadly on the same lines as the development rebate which had been discontinued earlier.

(c) Other Reserves and Surplus: All reserves other than capital reserve and development rebate reserve are shown under this item together with balance of profit/loss carried forward. This also include special depreciation reserve or initial depreciation reserve.

3. Provisions:

(a) Depreciation Provision: This represents depreciation provided on various fixed assets, viz., buildings, plants and machineries and other fixed assets. This item figures in sources of funds but the accumulated depreciation figures in the statements on assets.

(b) Taxation Provisions: This is taken net of advance payment

of income tax and includes provision for wealth tax, income tax, capital gains tax, super tax and agricultural income tax.

(c) Other Current Provisions: This includes provisions for dividends declared, bonus to staff, employee's welfare, repairs, contingencies and provisions for obsolescence, etc.

(d) Non-Current Provisions: This includes provisions for gratuity, pension and superannuation benefits to employees, etc.

4. Borrowings:

(a) Borrowings from Banks: All borrowings from banks including loans against mortgages and advances against the borrowing companies' debentures lodged with banks as security are included in this item.

(b) Borrowings from other institutional agencies: These include borrowings from all institutional agencies other than banks, Indian as well as foreign including Industrial Finance Corporation of India and State Financial Corporations. From 1981-82, however, borrowings from foreign institutional agencies are reported separately.

(c) Borrowings from Government: Borrowing from central and state governments and foreign governments are shown in this item.

(d) Other Borrowings: This item includes all borrowings not covered under any of the above categories. Thus it comprises borrowings from Indian and foreign companies, managing agents, secretaries and treasurers and directors and also deposits from public and other borrowings not classified elsewhere such as debentures issued to public, convertible notes, sterling debenture stock, etc. Deferred payment credits and hire purchases liabilities are also included here.

5. Trade Dues and Other Current Liabilities:

(a) Sundry Creditors: This item comprises sundry creditors, liabilities for goods supplied, liabilities for expenses and liabilities for other finance.

(b) Other Current Liabilities: This includes liabilities to subsidiary companies, interest on loans, unclaimed dividends, bills payable, trade deposits, managing agents remuneration payable, share application money (including premium received), calls in advance, outstanding liabilities for expenses and other liabilities of a current nature.

6. Miscellaneous Non-Current Liabilities: This item includes employee's contribution to provident fund and all other non-current liabilities not elsewhere classified.

The following items figure in the statements on assets as well as in statements on uses of funds.

7. Gross Fixed Assets: The gross value of fixed assets i.e., gross of depreciation is shown in this item. It include the following components.

(a) Land: This is the gross value of freehold and leasehold land, mines, quarries, collieries.

(b) Buildings: This includes factory buildings, staff and workers' quarters, godowns, hospital for staff, creche, canteen, library, recreation centre, etc.

(c) Plant and Machinery: This item includes all types of plant and machinery used in the production process, e.g., engines, generators, motors, transformers, spindles, looms, humidifiers, sprinklers, boilers, foundries, kilns, electrical installations, etc.

(d) Other Fixed Assets: All installations and equipments used for production purposes, other than those grouped under 'Plant

and Machinery' are classified under this item.

8. Net Fixed Assets: This item is derived by deducting accumulated depreciation provision from total gross fixed assets. However, this item does not figure in statements on uses of funds.

9. Inventories: Inventories include the following three components.

(a) Raw materials, components, etc.: This item include all types of raw materials used in the manufacture of the final product/products.

(b) Finished Goods and Work-in-Progress: All types of finished products of the company and also work-in-progress are included in this item.

(c) Others: This item includes stores and spares used by the company for maintenance of its plant and machinery, buildings, transport equipment, etc., food stuffs for canteen run for benefit of employees, patters, tools, implements, and jigs, office stationery, tins, gunnies and other packing material, building material etc., goods in transit, if not included as raw materials or finished goods are included here.

10. Loans and Advances and Other Debtor Balances: This item consists of the following two components.

(a) Sundry Debtors: This item is taken net of provision for bad debts.

(b) Others: It includes all loans and advances and other debtor balances other than sundry debtors. This item covers dividend/interest accrued on investments, loans and advances to subsidiaries, companies, under the same management and other loans and advances including those to staff, balances in current

account with managing agents, secretaries, treasures, bills receivables, pre-paid expenses, trade deposits with companies and others, excise duty claims, export dues claims and similar items.

11. Investments: This item include five components:

(i) government securities, (ii) semi-government securities, (iii) industrial securities (iv) shares and debentures of subsidiary companies and (v) others (investments in Unit Trust of India, in shares of co-operative, partnership and proprietary concerns).

12. Other Assets: This item include (i) immovable properties (not used directly or indirectly for production purposes),

(ii) Intangible assets (good will, patent, trade markets etc.)

(iii) miscellaneous non-current assets (assets earmarked for employees provident fund, gratuity etc.

13. Cash and Bank Balances: This item comprises of (i) fixed deposits with banks, (ii) other bank balances and (iii) cash in hand.

The following items figure in the statements on income, expenditure and appropriation.

14. Sales: All receipt from sales of finished goods and services of the company including sale bye-products, waste and scrap are included in this item. Sales are net of rebate and discount and excise duty and cess.

15. Gross Profits: This item represents profits before tax provision and interest.

16. Interest: It comprises of gross interest paid on all borrowings, debentures, income tax, arrears, etc.

17. Profits Before Tax: This item represents the total of tax provision, dividends distributed and profits retained.

18. Tax Provision: This is the provision towards corporate tax liability and includes amounts set aside for meeting liability of income tax, super tax, sur-tax, and taxes paid during the year but excludes sales tax, cess and other duties.

19. Profits After Tax: This is the differences between profits before tax and tax provision. It is the profit net of all expenses and tax provision and represents the amounts available for transfer to reserves and for distribution of dividends to shareholders.

20. Dividends: This item represents the total amount distributed/declared as dividends on ordinary and preference shares during the year and is gross of tax cut at source.

21. Profits Retained: This comprises profits retained in business in the form of transfers to various reserves (other than taxation and depreciation) and the balance of profit/loss carried to balance sheet.

Limitations of RBI Company Finance Data

The RBI company finance statistics which are based on documents like annual reports and accounts of the selected companies are subject to certain limitations.

1. The statements on basic data presented viz., profit and loss account, balance sheet and sources and uses of funds, show only the combined position, and not the consolidated position, for the group of companies for which the data are presented as inter-corporate transactions are not adjusted while combining the data.

2. As the published accounts of a company cover all its industrial activities and the companies are grouped according to

the main activity of the company, the combined data for a particular industry will include figures relating to the subsidiary activities included in that industrial group. Thus the data will not be strictly representative of the industrial group for which they are presented.

3. The RBI company finance studies are based on balance sheets and profits and loss accounts of companies closed at different time intervals. As the individual accounts for any study year do not relate to the same period, the combined figures do not depict the position for the year ended June or March or the accounting year July-June or April-March as the case may be.

4. RBI company finance studies are based on balance sheet data of the existing companies only and do not include new companies.

5. RBI company finance studies are based on sample of companies and size of the sample changes over time as we have already discussed. Even though size of sample is kept constant for a quinquennium, the data may not relate to the same group of industries over the entire five year period. So comparability is limited to that extent.

6. RBI company finance studies are not based on Random Sample Method, rather it is a selective sample. However, this drawback might to some extent be compensated by its large coverage.

The above limitations would not, however, materially affect the trend analysis in terms of financial ratios. For change in sample size, we have tried to make the sample sizes comparable over time through some sort of normalization in Chapter V and Chapter VI. The analysis in chapter V is based on

rates whereas per firm values are used in chapter VI⁴.

C. Methodology:

The study covers the time period 1961-62 to 1985-86. The broad trends and patterns of financing of the private corporate sector is done through ratio analysis. The statements on sources of funds have been used for the purpose. The percentage ratio of different components of sources to total sources have been worked out for the entire period. For sake of illustration, the ratio have also been worked out after blocking the data together of five years period of each of the series i.e., 1961-62 to 1965-66, 1966-67 to 1970-71, 1971-72 to 1975-76 1975-76 to 1980-81 and 1980-81 to 1985-86. The ratios have also been worked out for individual industries i.e., sugar, tobacco, cotton textiles, silk and rayon textiles, aluminium, engineering, chemicals, cement, rubber and rubber products, paper and paper products and electricity generation and supply. Similarly the ratios have been worked for different size groups for 3 time points i.e., 1971-72, 1975-76 and 1981-82 based on censuses of public limited companies.

Chapters V and VI are based on multiple regression. Ordinary Least Squares (OLS) method have been used for the purpose. The goodness of fits are judged by appropriateness of the sign of regression coefficients, t-statistic value, coefficient of multiple determination (adjusted R²) and Durbin-Watson Statistic. The details about the specifications of models etc. are discussed in the respective chapters.

⁴For details refers to the respective chapters.

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