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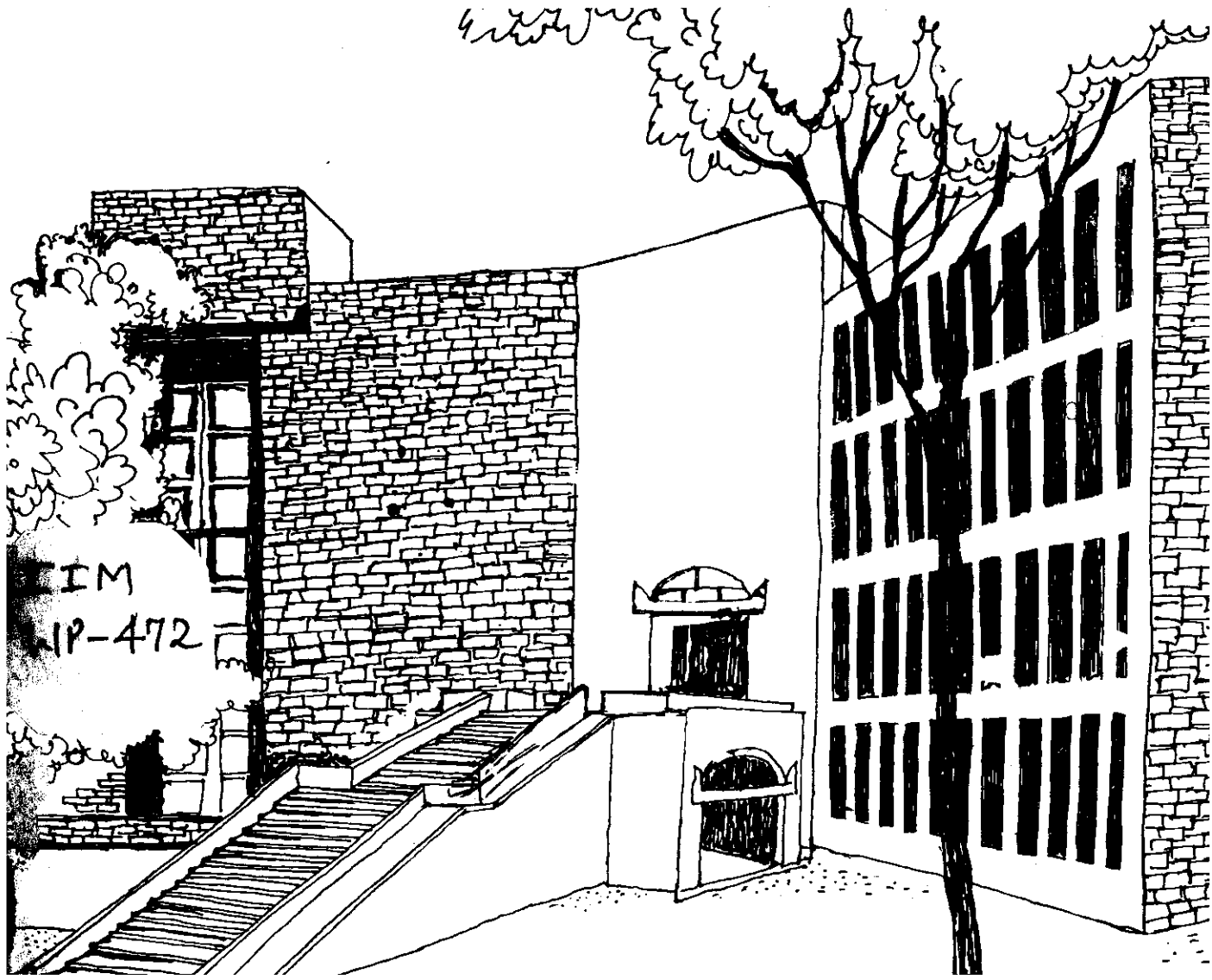

THE PATTERN OF FINANCIAL LEVERAGE: A CROSS-SECTION STUDY OF LISTED INDIAN COMPANIES

By

I.M. Pandey

W P No. 472

August, 1983

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD-380015
INDIA

THE PATTERN OF FINANCIAL LEVERAGE : A CROSS-SECTION STUDY OF LISTED INDIAN COMPANIES*

The study has two objects : (i) to ascertain the corporate managers' attitudes about the use of leverage, and (ii) to examine, in the light of the attitudes so revealed, the industrial pattern, trend and volatilities, of leverage, and the impact of size, profitability and growth on leverage. The study will specifically focus to seek answers to the following questions:

1. How do the company managements react to the use of financial leverage? Do they have any understanding of the costs of various sources of finance and the concept of the optimum capital structure?
2. Are there significant industrial differences in the use of financial leverage?
3. What are the trends in the industrial pattern of leverage?
4. Do companies within the same industry reveal homogeneity in the use of leverage?
5. Do some industries rely more on trade credit than others?
6. Do companies use different sources of outside capital as substitutes for each other?

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*Research & Publication Committee, Indian Institute of Management, Ahmedabad provided financial grant for this project.

7. Does the pattern of the short-term sources of outside debt show more variability than that of the long-term sources?
8. Does there exist a systematic structural relationship between leverage, on the one hand and size, profitability and growth, on the other?

METHOD OF INVESTIGATION

To achieve the first object of ascertaining the corporate managers' attitudes about the use of debt, a questionnaire suervey was undertaken. The questionnaire was sent to 100 randomly selected companies, out of which only 30 companies replied. The analysis of the completed questionnaires is given in the following section. The list of the companies is contained in Annexture 1.

For the purpose of the second object of the study, data for 743 companies in 18 industrial groups were collected from the Bombay Stock Exchange Directory. To see the trend and stability of the leverage pattern over years, data were analysed for 1973-74 and 1980-81. Thus all those lited companies for which the required data were available were included for analysis.

Leverage is defined as total liabilities to total assets (TL/TA) percentage for detailed analysis. It would be realized that 100 per cent minus TL/TA percentage would give the net worth percentage in the total financing.

Leverage trend is defined as the average trend (per annum) over the eight-year period (1973-74 to 1980-81) of the leverage percentages. It is measured by the trend of the least squares regression line drawn for leverage percentages. Leverage volatility is represented by the spread of the investigated values around the calculated trend. The closer they cluster around the trend the less volatile they are and vice versa.

For studying industrial patterns and the structural relationships, all companies are classified by industry, size, profitability and growth. No company is included in more than one industry. Size is defined as total sales and companies are classified in nine size groups. They are also classified by two measures of profitability - net sales to total assets (NS/TA) ratio and return on capital employed (ROCE) and by growth in sales. Growth in sales i measured as the compound growth per year over the last eight years.

MANAGEMENT ATTITUDES TOWARDS LEVERAGE

As stated, a survey was conducted to ascertain by questioning managements of companies the understanding of the optimum capital structure, cost of capital and factors which lenders consider important in granting loans. This section gives the analysis of 30 responses received from the companies listed in Annexture 1.

COST OF SOURCES OF FINANCE

In the first question the respondents were asked to rank the following sources of finance from the least to the most expensive:

(i) Ordinary share capital

(ii) Preference share capital

(iii) Reserves and surplus

(iv) Bank borrowings

(v) Long-term debt

Exhibit 1 tabulates the responses. 26 out of 30 respondents

EXHIBIT 1 : Ranking of Sources of Finance (from Least to Most Expensive)

Source of Finance \ Rank	5	4	3	2	1	Total Responses
Ordinary share capital	26	2	1	0	1	30
Preference share capital	2	7	17	2	1	29*
Reserves and surplus	8	14	4	2	4	30
Bank borrowings	2	2	5	21	0	30
Long-term debt	0	2	0	4	23	29*

* One company each did not give any rank to preference share capital and long-term debt.

(87%) regarded ordinary share capital as the most expensive. Out of twenty six, seven ranked ordinary share capital and reserves and surplus and one also preference share capital as being jointly the most expensive. One respondent considered ordinary share capital to be least expensive. Twenty three companies (77%) regarded long-term debt as the cheapest source. Of the remaining seven companies, four ranked reserves and surplus, one each ordinary share capital and

preference share capital as the cheapest and one company, which stated not employing any long-term debt, did not rank this source. After long-term debt, the largest number of companies (21) ranked bank borrowing as the second cheapest source. Seventeen respondents regarded preference share capital as cheaper than ordinary share capital and reserves and surplus and more expensive than bank borrowing and long-term debt. None of the companies indicated long-term debt as the most expensive, although two companies felt bank borrowings as the costliest source of finance.

In response to the question whether ordinary share capital and retained earnings were cost free, only one respondent, who also ranked them as the least expensive, regarded these sources as cost free. All other companies (29) not only stated that ordinary share capital and retained earnings involved costs but also defined costs of these sources. A variety of definitions were provided, some defining them together while others separately. A large number of companies however defined cost of equity in terms of opportunity cost. Some typical examples are quoted below:

> "The profit before tax required to be earned to pay the expected dividends divided by the equity capital will provide cost of equity capital".
>
> "When several projects demand the use of these sources of finance(ordinary share capital and reserves and surplus), opportunity costs become the basis for decisions depending on what yields highest returns. Besides, these funds should generate profits enough to service their use in business. Hence, there is a cost for these sources of finance."

"Cost of equity capital and retained earnings is the minimum post tax return required as per industry standard for payment of dividend."

"Profits ploughed back, in fact, is an expensive source of finance which represent funds which would have normally gone to shareholders in the form of dividend but have remained (undistributed) due to company following a prudent financial policy - a sacrifice made by shareholders. The cost of such earnings could be:

$$\frac{\text{Profit after tax - Preference dividend}}{\text{Equity + Reserve}}$$

Further, in the case of equity shares, there would be an additional expenditure, such as shares servicing etc."

"The cost of equity capital to the organization cannot really be measured precisely. One approach would be to find out what the cost is to the present shareholders. Even if the expectations about future profits materialise there could also be difference of opinion about the extent of cost but perhaps the only logical procedure for computing the cost of equity funds is to find out the alternative cost".

"In the case of the retained earnings although there may not be any tangible or direct cost within the business there may be important opportunity costs in the shape of various investment opportunities foregone".

"The cost of ordinary share capital is the rate of return that the company must earn so that there is no diminution in the value of the shares. It may be expressed as the current yield of the share plus the growth in the rate of dividend linked either to inflation or expectation by the shareholders..... The retained earnings .....will produce a future growth in dividends.. ..... without a change in financial risk or dilution of earnings..... The cost of profits ploughed back is the same as that of ordinary share capital....."

"For share capital the rate of dividend (pre tax) is the cost and for internal accruals at least that of the bank borrowings".

"Quantification is difficult. In principle, cost of debt + premium for business and financial risk - in the region of 25% after tax".

"On ordinary share capital, a company is expected to decrease dividends. This is to be considered as the cost of this finance. Profits ploughed back also cannot be considered cost free, as if that money was not ploughed back the company will have to borrow further".

"Cost of equity is the earning capacity of equity enjoyed in the past and your plan to improve if the performance was not satisfactory in the past. At least the rate of dividend you would pay and the safe cover".

It may be clear from some of the above statements that a number of companies have wrong notions about the cost of equity. It is incorrect to define the cost of equity as the dividend rate (pre or post tax), or the return on book-value of equity, or dividend or earnings yield. The concept of the cost of equity is intimately related to the value of share. It is the minimum rate of return <u>required</u> by the shareholders to keep the present value of the share unchanged. The cost of equity therefore is measured as the expected dividend yield <u>plus</u> expected growth in dividends. Only in the case of constant firms, the cost of equity will be equal to the expected dividend yield, which would also be equal to the expected earnings yield (or earnings-price ratio). An alternate definition of the cost of equity is the risk-free interest rate <u>plus</u> risk premium. In practice, the difficulty arises in determining the risk premium, although the capital asset pricing

model gives lot of insights in this regard. The difficulty in computing theoretically correct cost of equity however should not be cited to use an illogical measures of the cost of equity.

PREFERENCE FOR BORROWINGS

In answer to the question whether a company would always prefer to borrow even if other sources of finance (for example, equity financing) were available, thirteen respondents indicated that they would always prefer to borrow. The common arguments for preferring borrowings were: (i) tax deductibility of interest on debt; (ii) higher return to shareholders due to gearing; (iii) complicated procedures for raising equity capital; (iv) no dilution of ownership and control; (v) equity financing resulting in a permanent commitment as compared to debt. Some of the statements of respondents favouring borrowing are given below:

> "Investment of borrowed funds yielding a higher return than cost would maximise return on investment to the owners of business".
>
> "The company would prefer to borrow as the after-tax cost of debt is much less than the cost of equity as the interest is tax deductible in computing the taxable income, particularly when the company has a very high marginal rate of taxation".

> "Post tax borrowing works out cheaper. Procedure for raising fresh equity finance (are) more complicated and ability to raise such finance will depend on various factors over which the company has no control".

> "It is better to reserve the equity finance available for future growth and expansion. Further in the long-run cost of borrowed funds are cheaper compared to equity financing. Equity financing will end in a permanent liability compared to borrowings".

Six companies replied that they would not show preference for borrowings. They did not however give any reason for their attitude. The remaining eleven companies stated that the choice of financing would depend on a number of factors. These companies regarded internal and external parameters influencing the financing choice. The internal factors included the purpose for which funds were needed, earnings capacity, existing capital structure, ability to generate cash flows, investment plans etc. The external constraints were thought to be capital and money market conditions, stipulations regarding debt-equity mix and convertibility clause etc. Some of the typical statements are quoted below:

> "This (preference to borrow) would really depend on the capital gearing at that time for the unit, the need for which the funds were required and the profit being generated and the cash flow of the unit".

> "The question cannot be answered by saying either yes or no. The choice of particular source of finance depends on number of factors and we do feel in its own interest there cannot be any organization which would always prefer to borrow even if equity finance is available and vice versa".

"The answer cannot be yes or no always. It is the pattern of finance, the use of funds and its earning capacity (estimates) on the basis of which finance mix can be determined".

".....borrowing is subject to parameters like convertibility clause, interest rate, risk of bankruptcy etc".

"There can be no specific preference towards borrowings as a source of finance. The company's financial requirement will vary from time to time depending upon factors such as its existing capital structure, investment plans relating to expansion, modernisation and replacement as also its margin money requirement for incremental working capital. In addition, the costs of share issue, existing money market and banking conditions and the impact of statutory regulations would influence the mix of finance required by a company".

FACTORS INFLUENCING LENDING DECISIONS

In practice, a company may not be able to borrow whenever it wants to do so. Lenders would grant loan after a proper evaluation of certain characterstics of the company. We tried to ascertain from the responding companies the importance of factors which lenders consider while deciding to grant loan. Exhibit 2 tabulates the frequencies of rankings given to various factors by the respondents. One respondent did not rank the factors considering this to be practically difficult while another gave equal ranking to only three factors - security, profitability and quality of management . Of the remaining, the largest number of companies, viz, nine, considered quality of management as the most important factor, followed by profitability. Eight companies gave second ranking to profitability

Exhibit 2: Ranking of Factors Considered Important in Lending Decision (from Most to Least Important)

Factors \ Ranks	1	2	3	4	5	6	7	8	9	10
Profitability	6	8	3	4	3	2	1	1	-	-
Liquidity	3	6	6	3	3	2	1	2	1	-
Growth (Sales)	1	3	5	2	2	3	2	8	2	-
Existing Debt-Equity Ratio	2	3	4	5	5	5	1	2	-	-
Reseves Position	1	2	2	2	2	2	7	5	2	2
Fluctuations in Profits	-	3	1	1	1	3	5	1	12	-
Total Net Worth	-	3	3	5	3	2	7	3	1	-
Quality of Management	9	2	3	4	3	4	2	-	1	-
Security	6	6	3	4	3	1	-	2	3	-
Others	2	-	-	-	-	-	-	-	-	-

followed by liquidity (6 companies). Six companies each also gave first and second ranking to security. Fluctuation in profits was considered to be least important by majority of companies (12), followed by sales growth (8 companies). Existing debt-equity ratio and total net worth also were given poor rankings. One company thought the government's fiscal policy was most improtant in the lending decisions.

On the basis of the weighted score, the factors given in Exhibit 2 could be ranked in order of most to least important as given below:

Profitability

Quality of management

Security

Liquidity

Existing debt-equity ratio

Growth in sales

Total net worth

Reserves position

Fluctuations in profits

It may be surprising to find lowest ranking for fluctuation in profits. On a priori basis, this should be an important variable in borrowing/lending decisions. A firm's ability to service debt would depend on profitability (more appropriately, cash flows) as well as variability of profits. The firm may be reasonably profitable on an average but the quality of its debt-servicing would be poor if its profits fluctuate widely. Debt adds financial risk; a fluctuating profitability would aggravate it further.

About one-third of companies have regarded the quality of management as a significant factor in the lenders' loan granting decision. The management would be considered of good quality by the lender if the firm is doing well financially. The lender is thus evaluating the financial characterstics and performance of the firm

rather than the management per se. The quality of management cannot be taken for granted if a firm managed by a managers belong to a particular business house. If a firm is performing well, how does it matter to the lender whether or not it belongs to some business house or management group? Logically therefore it is difficult to appreciate a very high importance accorded to the quality of management, independent of financial performance of the firm, in the lending decision.

OPTIMUM CAPITAL STRUCTURE

The respondents were also inquired about their understanding of the optimum capital structure, and whether or not, in their opinion, a company should maintain an optimum mix of debt and equity. Twenty five out of thirty stated that a company should have an optimum capital structure, four felt that capital structure need not necessarily be optimum and one did not respond at all. All respondents, except one, provided the definitions of the optimum capital structure. At least one-third of the companies seemd to be aware of the theoretical concept of the optimum capital structure, and defined it in terms of the minimum cost of capital or the maximum value to the shareholders. One of the companies gave a precise and theoretically correct definition of the optimum capital structure in the following words:

> "The optimum capital structure is that which maximises the value of the firm. The value of the firm is equal to the market value of stock plus the value of the firm's debt. Though leverage causes EPS, and consequently, the value of stock to increase, it also increases the firm's risk. Thus, increased leverage inolves a risk-return trade-off. Our policy is to keep our debt-equity mix around 1.5:1. Debt refers to long-term debt including debentures."

Yet another definition emphasising the value maximisation is as follows:

> "Optimum capital structure is a point where the value of the firm is maximised...."

The following is quoted a definition which refers to the cost of capital:

> "We can consider the capital structure to be optimum when the mix of the different sources of financing meets the following objectives"
>
> (i) minimises the cost of capital (weighted average cost of different sources of financing);
>
> (ii) ensures financial stability; and
>
> (iii) avoids liquidity problems."

If the optimum capital structure occurs at a point or within a range where the value of the share is maximum (or the cost of capital is minimum), how does one determine it in practice? The answer is provided by a respondent in the following words:

> "The optimum capital structure must take into account three variables: (i) favourable financial leverage, (ii) income tax leverage, and (iii) market condition, i.e., the reaction of the investors to changes in the capital structure of the company by the use of debt or equity financing."

> "An empirical approach to measuring capital structure would deal with variable of market conditions in determining the optimum capital structure. For example, a company may be in an industry that has an average debt-equity ratio of 1:1. It may be empirically demonstrated that the investing public does not discount the value of the company's stock as long as the company stays within a 40% of the industry average. If the optimum capital structure is viewed as a range, instead of a point, an optimum range can be developed based on the observation. The optimum range may begin 40% below 1:1 and continue up to 40% above it, or a debt-equity range from 0.6:1 to 1.4:1.
>
> "If a company maintains a capital structure within an empirically optimum range, the equity capital will not experience a decline in value due to excessive perceived risk by investors. As a management technique, the company can seek to maintain a position near the top of the range, thus allowing the company to take maximum advantage of financial leverage and the benefits of the income tax effect on interest. At the same time, the prices of the equity shares will not drop because of risk. Indeed, if investors discover the strategy, they may react by increasing the price earnings multiple on the premise that the company is exceptionally well managed to make such good use of financial and income-tax leverages".

Some companies make the mistake of assuming that the maximisation of profits leads to the maximisation of the shareholders' wealth. Consider the following statement made by one of the respondents:

> "The optimum capital structure in our opinion is one where the maximisation of profits to the shareholders can be achieved as the objective of the company is maximisation of the shareholders' wealth".

The criterion of profit-maximisation does not consider several practical problems, which are faced in practice when decisions about the efficient use of capital are made. It is unsuitable as an operational criterion for investment and financing decisions since it fails to take account of uncertainty and time. Even the measurement of profits is a difficult task since it depends on the accounting policies employed. The wealth (value) maximisation criterion measures benefits in cash flows and discounts them over time to take account of risk and uncertainty.

A few respondents have thought the optimum capital structure as the one that maximises the earnings per share. To quote one of the replies:

> "Optimum capital structure is that combination of debt and equity which gives the highest earnings per ordinary share in the long run".

The criterion of maximising EPS will invariably favour debt, at least in the case of profitable companies since the cost of debt, given the high tax rate in India, is quite low. With increased debt, EPS would look improved. However, like the profit maximisation criterion, the EPS criterion ignores risk. The belief that investors would be just concerned with the expected EPS is not logically founded. Investors in valuing the shares of a company consider both expected value of EPS and the variability about the expected value. Thus, a long-term view will tend to lead one to a criterion of wealth-maximisation than EPS-maximisation. The EPS-criterion is an important performance measure but not a decision criterion.

The optimum capital structure is a dynamic concept. As the time and market conditions - investors' behaviour, new securities, interest rates etc.-change, the optimum capital structure for a company also shifts. Industry norms and external factors also act as constraints to the determination of the optimum capital structure. The following answers of some of the respondents reflect this:

> "The optimum capital structure will depend on the industry and the position of the organisation... Normally 2:1 (debt-equity) ratio is considered optimum".

> "The optimum capital structure will vary from industry to industry. In highly capital intensive industries, the debt-equity ratio will be high. There is no precise definition of optimum capital structure. The debt-equity mix of any company would vary, depending on profitability, lines of business, the ability to exploit opportunities, and the philosophy of the company's management".

Similar views as above were expressed by other respondents also. Consider, for example, the following statement:

> "The optimum capital structure for an organisation is dependent on many factors. Under given circumstances it is always desirable to have a combination of equity and debt for financing the capital needs of the organisation. Use of debt and equity in proper proportion would lead to optimum capital structure. Besides industry characterstics the relative costs, risks, total fund requirement etc. are the major influencing factors in deciding the proportion of debt and equity within the capital structure. One should however bear in mind that what is optimum capital structure today for a business may not remain so for all times to come in the future as the total capital employed in the business changes considerably

> over a period of time and thereby necessitating change in the capital structure. In additional, general industrial environment also influences the optimum capital structure".

The fact that capital structure does not remain static is stated in the following words by one respondent:

> "In general the optimum capital structure would be one which strikes a proper balance in terms of earnings and risk-bearing among the various stakeholders of the company. Such an optimum would differ from industry to industry, and also over a period of time depending on the prevalent borrowing climate as weel as the company's own priorities. Under inflationary conditions however such an optimum structure is found to move markedly towards a higher ratio of debt as compared to earlier years".

The results of this section of the survey concerning the understanding of the optimum capital structure and the use of leverage indicates substantial basic conceptual thinking and clarity among majority of the corporate managers. It is also revealed that they would generally prefer to borrow, subject to internal and external constraints. Further, a number of them considered profitability, quality of management and security as the most important factors and profit variability as the least important factor in the lender's evaluation of their companies for granting loan.

ANALYSIS OF INDUSTRIAL PATTERN OF LEVERAGE

In this section, the industrial pattern of leverage, with trends and volatilities, is analysed. The patterns of six measures of leverage - total liabilities to total assets (TL/TA) ratio, long term debt, loans and advances and sundry creditors to total assets (LD +LA+SC/TA) ratio, long-term debt and loans and advances to total assets (LD+LA/TA) ratio, long-term debt total assets (LD/TA) ratio and sundry creditors to total assets (SC/TA) ratio - are studied. It is hoped that this will help to ascertain the complimentarity and substitutability of various sources of borrowed capital. However, in the subsequent sections only TL/TA percentages are analysed in detail. All forms of debt, including sundry creditors and provisions, provide gearing with different speads and also involve risk of non-payment and consequently, of bankruptcy. In fact, trade credit, being free of cost, would provide maximum gearing benefit in the case of profitable companies. Further, if it is true that various sources of debt are substitute for each other, then it is appropriate to analyse TL/TA ratio as a leverage measure.

INDUSTRIAL CLASSIFICATION

Exhibits 3 and 4 contain industrial classification of total liabilities to total assets (TL/TA) percentages; the percentage distribution of companies over eleven leverage levels is given for the periods 1973-74 and 1980-81. In 1980-81, the largest number of companies (25.4%) are concentrated in the 70-80% leverage level.

If all leverage levels are classified into four broad categories - low (0-30%), medium (30-50%, high (50-80%) and very high (above 80%) - it may be noted that only 3% companies are in low, 9.9% in medium, 62.8% in high and 24.2% in very high range of leverage. It is significant to note that five out of eighteen industries do not have any company in the0-40% leverage range, nine in the 0-30% leverage range. Nine industries has their largest number of companies in 70-80% leverage level, eight in 60-70% level and one in 30-40% level. Excluding aluminium which has very insignificant number of companies, coffee, cement and jute appear to be different from the general pattern. The former having low level of leverage while the later two have high level of leverage. Electricity has its concentration (66.7%) in the 60-70% level. Between the 0-40% leverage range,6.4% companies fall; only coffee and transport have significant percentage of companies in this range. Except coffee and electricity, other industries have, more or less, same distribution pattern in the 50-100 leverage range. Cement has the largest number of companies (31.2%) in the above 100% leverage level, followed by jute (22.7%).

The leverage level in 1973-74 was slightly low. The largest number of companies (26.1%) and industries (11) were in the 60-70% leverage level, although the high leverage range (50-80%) covered 64% companies as against 62.8% in 1980-81. The percentage of companies in the very high leverage level (above 80%) however

was substantially low (14.4%) in 1973-74 as compared to 1980-81 (which is 24.2%). This means that a larger number of companies have come in the negative net worth category in 1980-81. Cement, coffee, tea plantation and jute represented deviations from the general trend. The first three showing low levels of leverage while jute being highly levered. It is noticeable that cement companies have shifted towards high levels of leverage, most significant upward change being in above 100% level, in 1980-81. The companies in cotton spinning and trading also showed upward shifts. It is obvious that largest number of companies of all industries cluster around high leverage range of 70-80%. Indian industries thus employ a very high level of "other peoples' money".

The industrial analysis of the second measure of leverage - loans and advances plus long-term debt-plus sundry creditors as a percentage of total assets - is presented in Exhibits 5 and 6. In 1980-81, the companies on the whole are some what symmetrically distributed over the ranges of leverage. The 0-30% leverage range covers 14% companies while above 80% range covers 14.8% companies; each pairs of 30-40% and 70-80% levels and 40-50% and 60-70% levels covering equal percentages of companies while remaining largest number of companies (18-7%) concentrate in the 50-60% leverage level. In the low leverage range (0-30%), the groups of coffee, electricity, sugar and breweries, trading and transport and of cotton spinning and weaving, food products and jute are different from remaining industries. The first group of industries

shows significant concentration in the 0-30% leverage range while the later group has almost no company in this range. In terms of leverage levels, cement, jute and coffee display significant dissimilarity from the rest. The companies in cement and jute are distributed in high leverage levels, while in coffee they are concentrated in lower levels.

In 1973-74, larger number of companies were distributed in lower leverage ranges. It is noteworthy that compared to 1973-74, the percentage of companies in 0-30%, 30-50% and 50-80% leverage ranges declined, while increased in above80% level in 1980-81. The significant increase took place in the 90-100% and the above 100% levels. Between 1973-74 and 1980-81, cement, cotton spinning and weaving, jute and paper and pulp showed significant tendency to shift towards high levels of leverage, while coffee and electricity shifted to low levels.

Some times for certain purposes, such as to judge the interest-bearing ability of the company, leverage is measured in terms of interest-bearing debt to total assets. Loans and advances (mainly from banks) and long-term debt to total assets (LA+LD/TA) is such a measure. In 1980-81, the largest number of companies (21.5%) are in the 30-40% leverage range, followed by the 40-50% level (18.6%) and the 20-30% level (17.2%) (Exhibit 7).

Except coffee, metal alloys, sugar and breweries, trading and transport,the companies in all other industries are concentrated in the 20-50% leverage range. Coffee employs the lowest funded-debt, followed by trading,sugar and breweries and transport. The companies in metal alloys are distributed over the entire ranges of leverage. Cotton spinning and weaving and cement employ high leverage, the later having 25% companies beyond 60% leverage level. In 1973-74, more number of companies were in higher leverage levels, except in above 100% level (Exhibit 8). As compared to 1973-74, chemicals, coffee, electricity, jute, metal alloys, sugar and breweries and trading have become less levered while paper and pulp and tea plantation more levered.

The components of the above leverage measure - long-term debt to total assets (LD/TA) ratio and loans and advances to total assets (LA/TA) ratio,are also seperately analysed. It is noteworthy that for LD/TA ratio all industries have their largest number of companies in one leverage range, viz., 0-10% in 1980-81 (Exhibit 9). The 0-30% range covers about 90% of companies, about 60% covered in 0-10% range in both the periods. Coffee, food products, sugar and breweries, tea plantation and trading seem to have low degrees of leverage, Cement, cotton spinning, paper and pulp and transport have significant number of companies in 20-30% leverage level and beyond in some cases.

Except transport, no industry had any company distributed in leverage levels above 60% in 1973-74 (Exhibit 10). It is significant to note that the level of leverage has increased in 1980-81.

Exhibits 11 and 12 reveal that general level of loans and advances to total assets ratio is higher than long-term debt to total assets. The highest number of companies(26.0%) in 1980-81 are concentrated in the 20-30% range while in 1973-74, more or less, equal number of companies were distributed in 0-10%, 10-20%, 20-30% and 30-40% leverage levels. It may be observed that in 1980-81 companies in coffee, electricity, sugar and breweries, tea and transport seem to concerntrate in 0-10% leverage range, companies in cement, chemicals and electric equipment in 10-20% range and companies in cotton spinning, cotton spinning and weaving, general engineering, jute, metal alloys, paper and pulp and synthetic fibres in 20-30% range. Trading has equal number of companies distributed in 0-10% and 10-20% range while the largest number of companies in food products fall in 30-40% leverage level. A very insignificant number of companies fall beyond 60% leverage level in 1980-81. The 1973-74 pattern of LA/TA ratio was somewhat different. Almost equal number of companies were distributed in the 0-10%, 10-20%, 20-30% and 30-40% leverage ranges. Also, quite a significant number of companies (13.3%) were in the 40-50% leverage range. Coffee, electricity and transport employed low leverages in both periods, 1973-74 and 1980-81. As compared to 1973-74, the levels of leverage reduced in the case of cement,

coffee, cotton spinning, elecricity, jute and sugar and breweries and increased in other cases.

Sundry creditors is a cost free source of finance, and therefore, would provide maximum leverage advantages even in the case of marginally profitable companies. But because of its very short maturity excessive use of this source can prove to be vulnerable in financial stringencies. In 1980-81, eleven industries have the largest number of companies concentrated in the 10-20% leverage range , three each respectively in the 0-10% and 20-30% ranges and one in the 30-40% range (Exhibit 13). The companies in jute are fairly well distributed over almost all ranges of SC/TA ratio and thus, is a heavy user of sundry creditors. Coffee, followed by transport, uses it to the minimum extent. In 1980-81, more than 3/4 (i.e., 78%) companies have SC/TA ratio between 0-30% range, 18% between 30-50% range and 4% in excess of 50% level; the largest number of companies (33.6%) fall in the 10-20% range. This pattern was different in 1973-74. In 1973-74, 88.3% companies had concentrated in the0-30% range, 10.1% in the 30-50% range and only 1.5% in the above 50% range (Exhibit 14). Thus the level of SC/TA ratio has shifted upwards in 1980-81. The ratio has increased in the case of cement, cotton spinning and weaving, food products, jute paper and pulp and sugar and breweries, and declined in the case of trading and transport. It may be noted that jute companies were concentrated in 0-20% level in 1973-74, but they were scattered over all ranges of leverage in 1980-81.

LEVERAGE TRENDS AND VOLATILITIES

The detailed analysis for trend and volatility is done only for TL/TA ratio. In Exhibit 15 companies in each industry are distributed to seven ranges of leverage trend-three each as negative and positive and one neutral. It can be noticed that 37.7% of the companies showed neutral trend, 16.3% negative while 46.1% showed positive trend. Thus, over the eight year period, 1973-74 to 1980-81, the level of leverage has increased significantly. This is also indicated by the all industries average TL/TA ratio of 70.65% in 1980-81 (Exhibit 17) as compared to 62.44% in 1973-74 (Exhibit 18),an increase by 13%. Except cement, coffee, cotton spinning and tea plantation, the largest number of companies in all industries are concentrated in the neutral trend range. Cement has its largest number of companies in high positive trend category, and the remaining three in the low positive category. Exhibits 17 and 18 show that average TL/TA ratio for cement has increased from 57.87% in 1973-74 to 92.27% in 1980-81. Cotton spinning has an interesting trend pattern;it has equal number of companies in the medium and high positive and medium and high negative trend ranges. Cement does not have any company in the negative categories while electricity in negative and medium and high categories.

Exhibit 16 presents data on industrial classification of leverage (TL/TA) variability. Except electricity, none of the industries has significant number of companies in low volatility category (0-20%). Each of the seven industries - cotton spinning and weaving, general engineering, jute, synthetic fibres, tea plantation, trading and transport - has between 9-10.5% companies, cotton spinning, metal alloys, paper and pulp and tea plantation have 3-6% companies, aluminium and cement none, chemicals and electricity around 20-22% and electric equipments and food products about 15% companies in the low medium volatility category (2-4%). In the high medium category (4-6%), excluding aluminium, with insignificant observations, chemicals, coffee, cotton spinning, sugar and breweries and trading have 7-10% companies, cement, food products, general engineering, jute, synthetic fibres and trading 12.16% companies while others have 19-21% companies except metal alloys which has 27.3% companies. In the high volatility category, except electricity and aluminium, the former having larger number of companies and the later none, all industries have similar pattern. There are seven industries which appear to contain more or less number of companies than the general pattern in the very high volatility category (above 10%). Tea plantation seem to be most volatile.

Exhibits 17 to 20 contain data on the average levels of leverage and variability (measured by the coefficient of variation) of the six leverage measures for each of eighteen industries. The analysis of these data give interesting insights about the industrial classification of levels and variabilities of leverage. It may be observed that cement has the highest average TL/TA ratio (97.27%) but its variability is also next to highest (50.00%) in 1980-81. Coffee has the lowest average TL/TA ratio (50.78%) with a 37.94% variability. Except for cement (97.27%), jute (89.08%) and coffee (50.00%), the averages for other industries (excluding aluminium) cluster around the all industries average of 70.65% with a standard deviation of $\pm$ 11.66. On the other hand, companies within different industries show significant degrees of variabilities; cotton spinning and weaving being the most variable and electricity being the least variable. In 1973-74, jute had highest average TL/TA ratio (82.65%) and coffee lowest (40.57%); electricity was again least variable but, instead of cotton spinning and weaving, coffee was the most volatile. The all-industry average TL/TA ratio was low (62.44%) and also the standard deviation ($\pm$ 9.01). The pattern of LA +LD +SC/TA ratio has been more or less same as that of TL/TA ratio. In the case of funded-debt to total assets (LA+LD/TA) ratio, cotton spinning and weaving has the highest (48.58%) and coffee the lowest (9.63%) average in 1980-81. Coffee also had lowest average (15.14%), while metal alloys had the highest (43.09%) average in 1973-74. Coffee has shown highest variability in both periods and cotton spinning was least variable in 1980-81, while

electricity in 1973-74. Significant industrial variations can be seen in the average levels and volatilities when LA + LD/TA ratio is decomposed into LA/TA and LD/TA ratios. However, no definite pattern emerges. LD/TA ratio shows the most volatile inter-industry and intra-industry volatility among all leverage measures. It is therefore not a correct belief that the short-term sources of debt show more variability than the long-term sources.

In the case of SC/TA ratio except coffee, having the lowest average (10.30%) jute, having the highest average (42.85%) and transport (10.90%), all other industries' averages do not significantly differ from the overall average in 1980-81. Coffee is the most volatile and electric equipment least in the same period. It is interesting to note that SC/TA ratio shows much less inter-industry and intra-industry variations as compared to LD/TA ratio. In 1980-81, the average level and variability were similar in the case of SC/TA and LA/TA ratios. In 1973-74, industries had depended more ($1\frac{1}{2}$ times) on loans and advances (largely from banks) than sundry creditors.

Comparing all-industries averages, between 1973-74 and 1980-81, average levels of SC/TA, LD/TA LA +LD + SC/TA and TL/TA ratio increased, the average level of LA/TA declined and of LA +LD/TA ratio remained, more or less, the same. It would also be noticed that all leverage ratios, except LA/TA ratio, showed more inter-industry

volatility in 1980-81, compared to 1973-74. It is very significant result to note for both the periods that as we start calculating higher leverage ratios, the inter-industry differences start reducing. In both the periods, TL/TA raio was least variable, preceded by LA+LD+SC/TA ratio. It is therefore implied that industries employ various outside sources of debt as each other's substitutes, the overall leverage (TL/TA) ratio showing a lot of similarily for most of the industries.

CLASSIFICATION OF LEVERAGE BY SIZE

In Exhibits 21 and 22 leverage (TL/TA) percentages of 743 companies are classified by their sizes. Size is measured in terms of total sales. The highest percentage of companies in any particular leverage band for each size category is indicated. In 1980-81, the highest number of companies are contained in the 70-80% leverage level for four, in the 60-70% level for two, in the above 100% leverage level in the case of the smallest size group - Rs.0.0-Rs 1.0 crore -out of seven size groups. The first two small size groups contain equally highest percentages of companies in the above 100% leverage level. Thus a large number of small companies have negative net worth.

When the 1980-81 results are compared to 1973-74, we find shift of companies from smaller to higher size groups, and also companies moving towards higher levels of leverage. In 1973-74,

only two size groups have highest number of companies in the 70-80% leverage level, three in the 60-70% level and three in the 40-60% level. It is significant to note that larger percentages of companies have fallen in the above 100% leverage level in all size groups in 1980-81, except in the case of the last size group where the number of companies has come down to nil from the highest percentage of 12.5 in 1973-74. It is noticeable that in 1980-81 a larger number of companies are positioned in the leverage percentage beyond 70%, and that smaller the size, the larger is the percentage of companies in the above 100% leverage band.

A closer examination of the data also revels that smaller size companies (i.e, between Rs. 0.0 - Rs. 1.0 crore) are distributed over all bands of leverage. It is also evident that the larger companies somewhat tend towards higher leverage levels. For example, companies falling in the above Rs. 5.0 crores size category virtually have no company in 1973-74 and only 1.6% companies in 1980-81 in the 0-30% leverage range. By this, however, it is not suggested that smaller companies have smaller levels of leverage. It has been already shown that smaller companies also employ high level of outside capital.

CLASSIFICATION OF LEVERAGE BY PROFITABILITY

In an earlier section, our survey of the company managers' attitude towards leverage has shown that one of the most motivating factors for employing outside funds is the increased return for shareholders. The higher the profitability of a company, the higher will be the return for shareholders as the level of debt increases, although financial risk also increases. Profitability is also an indirect indicator of the debt-servicing ability of a firm, although profits and cash inflows need not synchronise. Theoretically, therefore, the most profitable companies should be employing more outside capital.

The leverage (TL/TA) ratio is classified by two measures of profitability - net sales total assets (NS/TA) ratio and return on capital employed (ROCE). Exhibits 23 and 24 present the leverage classification according to the six groups of NS/TA ratio respectively for 1980-81 and 1973-74. It is evident that on an overall basis, the productivity of assets (NS/TA) has improved over the years. In 1980-81, a larger number of companies have shifted to higher NS/TA ratio groups. For example, there has been a 17.9% fall in the number of companies in the NS/TA band of 0-1.0, which has been compensated by 14.4% increase in 1.0-2.5, 3.2% in 2.5-5.0 and 0.2% in above 5.0 NS/TA bands.

In 1980-81, four out of six profitability (NS/TA) groups have highest number of companies in the 70-80% leverage level and two respectively in 60-70% and 80-90% levels. In 1973-74, on the other hand, two groups had highest number of companies in the 70-80%, three in the 60-70% and one in the 50-60% leverage levels. Closer scrutiny of data reveals that in the 0.0-0.5 NS/TA group companies are scattered over all ranges of leverage, in the above 1.0 NS/TA groups a very insignificant number of companies fall in the 0-40% leverage level, and except the above 5.0 NS/TA group, all other groups have a good number of companies in the above 100% leverage level. Thus there does not seem to be a definite relationship between NS/TA ratio and TL/TA raio.

The analysis of the pattern of leverage in terms of ROCE indicates that the improved productivity of assets (measured by NS/TA ratio) has been translated by companies in improved ROCE, and that they have tended to move towards higher level of TL/TA ratios. Some interesting results emerge while classifying leverage by ROCE in 1980-81 (Exhibit 26). Two extreme profitability groups - the unprofitable group ($< 0.0\%$ ROCE) and the most profitable group ($> 30.0\%$ ROCE) of companies - contain a very large number of companies (respectively 40% and 29.5%) in the highest leverage level (above 100%). In 1973-74, no company was placed in the above 100% leverage level from the above 30% profitability group. It is implied therefore that among the most profitable companies in 1980-81 a large number of them have

negative net worth due to losses accumulated between 1973-74 and 1980-81. It may be observed that companies in the profitability groups ranging between 5-30% are largely concentrated in the 60-70% leverage level. Among the unprofitable companies, 15.7% were concentrated in the above 100% leverage level in 1973-74 (Exhibit 25). Four profitability groups - ranging between 0.0 -20.0% have highest number of companies in the 60-70% leverage level, and profitability groups - 20-30% and above 30 % have highest number of companies in the 50-60% level in 1973-74. What is thus evident from this analysis is that leverage classified by profitability (ROCE) does not display a systematic pattern.

CLASSIFICATION OF LEVERAGE BY GROWTH

Growth companies are regarded to employ high level of leverage. Leverage (TL/TA) ratios are therefore classified by growth in total sales. Exhibit 27 shows that over the eight-year period (1973-74 to 1980-81), sales of only 7% companies either declined or did not grow. It is also significant to note that about 3/4 (73%) of companies' sales has grown by more than 10 per cent per annum. This (growth) may be partially due to the inflation in the Indian economy. It is interesting to note that companies in the 5% negative and above 20% positive growth groups were distributed over almost all ranges of leverage. All growth (negative and positive) groups, except -3 to - 1, have significant percentages of companies in the above100% leverage band. It is noteworthy that among medium to very high

growth groups (i.e., 3 to above 20% range), the higher growth groups have lesser and lesser percentages of companies beyond 70% leverage bands:

Growth Categories	Percentage of Cos. in above 70% leverage bands
3–5%	80%
5–10%	53%
10–20%	50%
< 20%	45%

It is thus obvious that there does not seem to be any systematic relationship between growth and leverage.

CONCLUDING REMARKS

Our survey of the managers' attitudes towards the use of leverage has shown that a large number of them consider ordinary share capital as the most expensive and the long-term debt as the least expensive. Consisent with the theory, majority of the managers felt that ordinary share capital and retained earnings were not cost free, and opportunity cost is the cost of such sources. The practising managers have also shown a strong preference to borrow because of low cost of debt due to the tax deductibility of interest and the complicated procedures for raising the equity capital. Thus about 43% respondents would always prefer to borrow while 37% would like to borrow subject to the internal characteristics

of their companies and external constraints.

In the opinion of the responding managers, profitability, quality of management and security were the most important factors which a lender would examine at the time of granting loan. They felt that fluctuations in profts was least important, followed by the reserves and net worth positions, in the lending decisions.

It is interesting to note that almost all respondents were aware of the concept of the optimum capital structure, and its importance to the companies. More than 80% opined that every company should have optimum mix of debt and equity. A large majority of the respondents defined the optimum capital structure as the one with the minimum cost of capital or the maximum value of shares.

The highly favourable attitude of the corporate managers towards the use of leverage is borne out by the very high level of debt employed by the Indian industries. Considering all companies together, about 70 to 80% of their assets are financed by outside debt, including current liabilities. Companies employ trade credit as much as bank borrowings. The level of leverage in all industries have increased in the recent years as compared to 1973-74. It is noteworthy that the level of loans and advances, including bank borrowings, has declined, which seems to have been substituted by other sources.

The study also indicates that classifying leverage percentages by the type of industry does not produce any patterns which may be regarded systematic and significant. The trends and volatilities associated with the leverage percentages also do not support the belief that the type of industry has n an impact on the degree of leverage. The findings of this study thus raise doubt on the proposition such as the following:

> One kind of evidence in favour of the traditional positionis that companies in the various industry groups appear to use leverage as if there is some optimum range appropriate to each group. While significant inter-company differences in debt ratios exist within each industry, the average usage of leverage by broad industrial groups tends to follow a consistent pattern over time.1

It is also believed by the academic and commercial world that the level of debt employed by a company would be determined by factors such as size, profitability and growth. The study reveals that sizes of the companies have increased over years and also the levels of leverage. There is also some evidence of the tendency of large size companies to concentrate in the high levels of leverage. But it is difficult to say conclusively that size has an impact on the degree of leverage since our analysis also reveals that a large number of small firms also employ high levels of debt.

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1. Solomon, Ezra, The Theory of Financial Management. Columbia University Press, 1963, p.98.

The study also does not indicate a definite structural relationshipts between the degree of leverage, on the one hand and profitability and growth on the other. Although over time, profitability and growth have improved and so has the degree of leverage, yet majority of the profitability and growth groups of companies are concerntrated within narrow bands of leverage.

From the findings of the study - that the levels of leverage in the Indian industries is moving upwards and that the a large majority of companies'leverage decisions seem to be independent of their size, profitability, growth and industrial variations, it may not be inappropriate to imply that Indian companies generally borrow upto the maximum permitted level. A serious question can be therefore raised in this context : Is it a prudent policy on the part of companies to employ high degree of borrowed funds without any regard to their operating and financial characterstics? Making indiscriminate use of debt is undoubtedly an unsound financial policy. Such policy in the long-run would tend to make companies in India highly risky and most vulnerable in the face of uncertain economic and political envirionment. It is amply emphasised in the literature on the financial policy that a prudent debt policy ought to be decided in the light of its risk-return consequences and the firm's cash-flow adequacy. It is understandable that tax deductibility of interest charges and high rate of inflation tend the Indian companies to make unrestricted use of debt. But they should not fail to realise that in the long-run

they will not only loose the commercial flexibility, but also under the widely fluctuating economic conditions, even their survival would be endangered.

There is yet another broader implication of the excessive use of debt from the point of economic system. High level of debt also results in a leveraging of economic power, besides producing significant financial gearing. The growth of the capital market for equity capital is suspected to remain restrained if excessive debt is employed, and as a consequence, the economic power would get concentrated in the hands of a few persons in the companies. It need no emphasis to say that such potential concentration of power would prove counter-productive to the economic system.

What could be done to reduce the companies' excessive dependence on the other peoples' money? A proper answer to this question would require a detailed examination of issues such as the government's industrial, fiscal and monetary policies, the interest rate structure, the state of capital and money markets and strategies to develop them, the financial performances of the companies . the disclosure practices, the lending policies of financial institutions and so on. It is not within the scope of this study to elaborate on these issues.

Since the deductibility of interest charges for tax computation seems to be the most compelling motivation for using high level of debt, a debatable question may also be raised : Should not

interest charges, like dividends, be disallowed as deductible expense? We do not have a definite answer at this stage. However, it can be stated that if a company has a separate entity from its owners and lenders and if the total funds employed by the company is a pool of capital, it does not seem very logical to distinguish between the earnings of owners and lenders for tax purposes.

EXHIBIT 3

Industrial Classification of TL/TA (1980-81)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >10
1. Aluminium	0.4	0.0	0.0	0.0	0.0	33.3	33.3	33.3	0.0	0.0	0.0	0.
2. Cement	2.2	0.0	0.0	0.0	0.0	6.3	0.0	25.0	25.0	6.3	6.2	31.
3. Chemicals	12.5	0.0	0.0	3.2	5.4	10.8	22.6	23.6	17.2	6.4	1.1	9.
4. Coffee	4.7	0.0	0.0	8.6	22.9	20.0	20.0	20.0	5.7	0.0	0.0	2.
5. Cotton Spinning	4.8	2.8	2.8	0.0	0.0	5.5	16.7	38.9	27.8	5.5	0.0	0.
6. Cotton Sp. & Wv.	12.2	0.0	0.0	2.2	1.1	1.1	7.7	20.9	36.3	12.1	5.5	13.
7. Electric Equipment	8.5	0.0	0.0	0.0	0.0	0.0	11.1	25.4	31.7	15.9	4.8	11.
8. Electricity	1.2	0.0	0.0	0.0	0.0	0.0	11.1	66.7	22.2	0.0	0.0	0.
9. Food Products	1.9	0.0	0.0	0.0	7.1	7.1	21.4	28.6	28.6	7.1	0.0	0.
10. Gen. Engg.	13.3	0.0	0.0	0.0	2.0	4.0	15.1	21.2	34.3	10.1	5.1	8.
11. Jute	3.0	0.0	0.0	0.0	0.0	4.5	13.6	13.6	13.6	18.2	13.6	22.
12. Metal Alloys	9.7	0.0	0.0	0.0	4.2	8.3	13.9	13.9	33.3	5.6	5.6	15.
13. Paper & Pulp	4.4	0.0	0.0	0.0	3.0	6.1	24.2	21.2	24.2	3.0	15.2	3.
14. Sugar & Breweries	5.5	0.0	0.0	2.4	2.4	9.8	14.6	26.8	14.6	12.2	4.9	12.
15. Synthetic Fibres	3.1	0.0	0.0	8.7	4.3	8.7	26.1	34.8	8.7	4.3	0.0	4.
16. Tea Plantation	7.3	0.0	5.6	1.9	1.9	5.6	14.8	9.3	25.9	14.8	9.3	11.
17. Trading	2.5	10.5	0.0	0.0	0.0	5.3	15.9	15.9	26.3	15.9	10.5	0.
18. Transport	2.7	0.0	15.0	5.0	5.0	10.0	5.0	20.0	15.0	10.0	10.0	5.
	100.0	0.4	0.9	1.7	3.4	6.5	15.2	22.2	25.4	9.4	5.1	9.

EXHIBTT 4

Industrial Classification of TL/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	0.0	0.0	0.0	33.3	0.0	33.3	33.3	0.0	0.0	0.0	0.0
2. Cement	2.2	0.0	0.0	0.0	18.7	18.7	18.8	18.8	18.8	0.0	6.3	0.0
3. Chemicals	12.5	1.1	0.0	1.1	9.7	15.0	17.2	31.2	16.1	4.3	2.2	2.2
4. Coffee	4.7	0.0	11.4	25.7	17.1	20.0	14.3	5.7	0.0	2.9	0.0	2.9
5. Cotton Spinning	4.8	0.0	0.0	2.8	0.0	8.3	30.6	22.2	30.6	5.5	0.0	0.0
6. Cotton Sp. & Wv.	12.2	1.1	0.1	2.2	0.0	5.5	16.5	33.0	28.6	5.5	5.5	2.2
7. Electric Equipment	8.5	0.0	0.0	0.0	0.0	7.9	12.7	30.2	27.0	12.7	3.2	6.3
8. Electricity	1.2	0.0	0.0	0.0	0.0	11.1	0.0	77.8	11.1	0.0	0.0	0.0
9. Food Products	1.9	0.0	0.0	0.0	0.0	21.4	14.3	28.6	28.6	0.0	7.1	0.0
10. Gen. Engg	13.3	1.0	0.0	2.0	3.0	11.1	14.1	23.2	28.3	9.1	1.0	7.1
11. Jute	3.0	0.0	0.0	0.0	0.0	0.0	9.1	4.5	40.9	27.3	13.6	4.5
12. Metal Alloys	9.7	0.0	0.0	1.4	5.5	6.9	20.8	33.3	15.3	9.7	1.4	5.5
13. Paper & Pulp	4.4	0.0	3.0	0.0	15.2	9.1	24.2	27.3	9.1	3.0	3.0	6.1
14. Sugar & Breweries	5.5	2.4	0.0	0.0	4.9	14.6	14.6	29.3	22.0	9.7	2.4	0.0
15. Synethetic Fibres	3.1	4.3	0.0	0.0	8.7	13.0	21.7	26.1	21.7	4.3	0.0	0.0
16. Tea Plantation	7.3	0.0	3.7	5.5	13.0	24.1	16.7	13.0	7.4	11.1	1.8	3.7
17. Trading	2.5	0.0	0.0	5.3	0.0	0.0	10.5	15.8	42.1	10.5	10.5	5.3
18. Transport	2.7	5.0	10.0	5.0	0.0	5.0	15.0	30.0	15.0	15.0	0.0	0.0
	100.0	0.8	1.2	2.8	5.7	11.2	16.6	26.1	21.3	7.9	3.0	3.5

EXHIBIT 5

Industrial Classification of LA+LD+SC/TA(1980-81)

Type of Industry	% of Cos.	Leverage Range 0%-10	10%-20	20%-30	30%-40	40%-50	50%-60	60%-70	70%-80	80%-90	90%-100	>100
1. Aluminium	0.4	0.0	0.0	33.3	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0
2. Cement	2.2	6.3	0.0	0.0	12.5	6.3	25.0	6.3	6.2	18.8	6.2	12.5
3. Chemicals	12.5	0.0	3.2	5.4	22.6	15.1	20.4	12.9	4.3	4.3	1.1	10.8
4. Coffee	4.7	40.0	25.7	8.6	11.4	11.4	0.0	0.0	0.0	0.0	0.0	2.9
5. Cotton Spinng.	4.8	2.8	0.0	8.3	13.9	25.0	25.0	22.2	0.0	2.8	0.0	0.0
6. Cotton Sp. & Weaving	12.2	0.0	0.0	2.2	4.4	7.7	22.0	17.6	22.0	6.6	6.6	11.0
7. Electric Equipment	8.5	0.0	1.6	3.2	7.9	22.2	20.6	17.5	12.7	3.2	0.0	11.1
8. Electricity	1.2	11.1	11.1	11.1	11.1	33.3	11.1	11.1	0.0	0.0	0.0	0.0
9. Food Products	1.9	0.0	0.0	0.0	14.3	28.6	28.6	21.4	7.1	0.0	0.0	0.0
10. General Engg.	13.3	0.0	3.0	10.1	9.1	16.2	19.2	23.2	7.1	2.0	4.0	6.1
11. Jute	3.0	0.0	0.0	0.0	0.0	13.6	22.7	0.0	9.1	22.7	13.6	18.2
12. Metal Alloys	9.7	1.4	1.4	5.6	9.7	9.7	18.1	16.7	19.4	4.2	6.9	6.9
13. Paper & Pulp	4.4	0.0	0.0	9.1	3.0	18.2	15.1	21.2	12.1	9.1	9.1	3.0
14. Sugar & Breweries	5.5	2.4	7.3	14.6	12.2	9.8	26.8	7.3	7.3	4.9	2.4	4.9
15. Synthetic Fibre	3.1	0.0	8.7	0.0	21.7	17.4	26.1	4.3	13.0	0.0	0.0	8.7
16. Tea Plantation	7.3	7.4	9.3	5.6	7.4	18.5	11.1	24.1	13.0	3.7	0.0	0.0
17. Trading	2.5	10.5	5.3	5.3	15.8	15.8	15.8	15.8	10.5	5.3	0.0	0.0
18. Transport	2.7	15.0	10.0	0.0	15.0	20.0	5.0	0.0	25.0	5.0	0.0	5.0
	100.0	3.8	4.2	5.9	10.9	15.3	18.7	15.5	10.9	4.7	3.2	6.9

EXHIBIT 6

Industrial Classification of LA+LD+SC/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	0.0	0.0	33.3	0.0	33.3	0.0	33.00	0.0	0.0	0.0	0.0
2. Cement	2.2	0.0	6.3	0.0	18.8	25.0	12.5	18.8	12.5	0.0	6.3	0.0
3. Chemicals	12.5	3.2	1.1	8.6	14.0	16.1	26.9	11.8	9.7	3.2	3.2	2.2
4. Coffee	4.7	45.7	17.1	8.6	5.7	5.7	5.7	5.7	2.9	0.0	0.0	2.9
5. Cotton Spnng.	4.8	0.0	2.8	2.8	11.1	27.8	22.2	22.2	11.1	0.0	0.0	0.0
6. Cotton Sp.& Weaving	12.2	1.1	2.2	4.4	6.6	19.8	30.8	19.9	8.8	4.4	0.0	2.2
7. Electric Equipment	8.5	0.0	1.6	4.8	6.3	14.3	19.0	20.6	15.9	11.1	0.0	6.3
8. Electricity	1.2	0.0	0.0	0.0	22.2	55.5	22.2	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	0.0	0.0	7.1	21.4	7.1	28.6	28.6	0.0	0.0	7.1	0.0
10. Gen. Engg.	13.3	1.0	1.0	10.1	11.1	13.1	12.1	24.2	14.1	4.0	4.0	5.0
11. Jute	3.0	0.0	0.0	0.0	0.0	4.5	9.1	22.7	36.4	22.7	4.5	0.0
12. Metal Alloys	9.7	0.0	8.3	4.2	6.9	13.9	26.4	18.0	9.7	5.6	1.4	5.6
13. Paper & Pulp	4.4	3.0	6.1	9.1	15.1	21.2	12.1	12.1	9.1	6.1	0.0	6.1
14. Sugar & Breweries	5.5	2.4	4.9	7.3	12.2	29.3	17.1	7.3	12.2	4.9	0.0	2.4
15. Synthetic Fibres	3.1	4.3	0.0	17.4	30.4	4.3	21.7	8.7	13.0	0.0	0.0	0.0
16. Tea Plantation	7.3	5.6	3.7	13.0	25.9	13.0	16.7	5.6	11.1	3.7	0.0	1.9
17. Trading	2.5	0.0	10.5	5.3	10.5	10.5	10.5	31.6	15.8	0.0	0.0	5.3
18. Transport	2.7	15.0	0.0	5.0	10.0	20.0	10.0	15.0	10.0	15.0	0.0	0.0
	100.0	4.0	3.6	7.1	11.8	16.4	19.5	16.6	11.4	4.8	1.5	3.1

EXHIBIT 7

Industrial Classification of LA+LD/TA (1980-81)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	33.3	0.0	33.3	0.0	33.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	6.3	6.3	25.0	18.8	18.8	0.0	6.2	6.2	6.3	0.0	6.3
3. Chemicals	12.5	7.5	11.8	26.9	23.6	14.0	5.4	3.2	0.0	1.1	0.0	6.5
4. Coffee	4.7	62.9	17.1	11.4	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
5. Cotton Spinning	4.8	5.6	5.6	22.2	30.6	30.6	5.6	0.0	0.0	0.0	0.0	0.0
6. Cotton Spg & Weaving	12.2	1.1	2.2	12.1	28.6	35.2	9.9	3.3	2.2	1.1	0.0	4.4
7. Electric Equipment	8.5	11.1	7.9	17.5	19.0	20.6	6.3	9.5	0.0	0.0	0.0	7.9
8. Electricity	1.2	22.2	22.2	0.0	44.4	11.1	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	14.3	7.1	14.3	21.4	28.6	14.3	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	9.1	10.1	18.2	28.3	13.1	14.1	1.0	2.0	1.0	0.0	3.0
11. Jute	3.0	0.0	0.0	27.3	27.3	22.7	9.1	9.1	0.0	0.0	0.0	4.5
12. Metal Alloys	9.7	5.5	15.3	11.1	13.9	15.3	19.4	6.9	2.8	2.8	1.4	5.6
13. Paper & Pulp	4.4	3.0	6.1	9.1	33.3	12.1	15.2	15.2	0.0	3.0	3.0	0.0
14. Sugar & Breweries	5.5	29.3	14.6	24.4	2.4	14.6	7.3	4.9	2.4	0.0	0.0	0.0
15. Synthetic Fibres	3.1	8.7	8.7	26.1	21.7	21.7	4.3	0.0	8.7	0.0	0.0	0.0
16. Tea Plantation	7.3	14.8	18.5	9.3	20.4	22.2	7.4	3.7	3.7	0.0	0.0	0.0
17. Trading	2.5	21.1	31.6	21.1	15.8	5.3	5.3	0.0	0.0	0.0	0.0	0.0
18. Transport	2.7	35.0	0.0	10.0	10.0	10.0	5.0	15.0	10.0	0.0	0.0	5.0
	100.0	12.4	10.4	17.2	21.5	18.6	9.0	4.4	1.9	0.9	0.3	3.4

EXHIBIT 8

Industrial Classification of LA+LD/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range % 0–10	% 10–20	% 20–30	% 30–40	% 40–50	% 50–60	% 60–70	% 70–80	% 80–90	% 90–100	% >100
1. Aluminium	0.4	0.0	0.0	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	6.3	12.5	12.5	12.5	31.3	6.3	12.5	0.0	6.3	0.0	0.0
3. Chemicals	12.5	6.5	10.8	17.2	19.3	22.6	7.5	7.5	4.3	2.2	1.1	1.1
4. Coffee	4.7	62.9	8.6	5.7	11.4	2.9	2.9	5.7	0.0	0.0	0.0	0.0
5. Cotton Spnng.	4.8	2.8	5.6	19.4	25.0	27.8	11.1	8.3	0.0	0.0	0.0	0.0
6. Cotton Spg. & Weaving	12.2	3.3	5.5	15.4	28.6	33.0	9.9	3.3	1.1	0.0	0.0	0.0
7. Electric Equipment	8.5	7.9	12.7	12.7	14.3	17.5	14.5	11.1	4.8	3.2	1.6	0.0
8. Electricity	1.2	0.0	11.1	11.1	44.4	33.3	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	14.3	14.3	14.3	28.6	14.3	7.1	0.0	7.1	0.0	0.0	0.0
10. Geng. Engg.	13.3	9.1	14.1	22.2	11.1	19.2	12.1	5.0	2.0	3.0	1.0	1.0
11. Jute	3.0	0.0	0.0	4.5	50.0	27.3	18.2	0.0	0.0	0.0	0.0	0.0
12. Metal Alloys	9.8	9.7	2.8	11.1	20.8	20.8	18.1	6.9	4.2	1.4	2.8	1.4
13. Paper & Pulp	4.4	3.0	12.1	21.2	24.2	12.1	12.1	3.0	6.1	3.0	0.0	3.0
14. Sugar & Breweries	5.5	12.2	14.6	9.8	29.3	12.2	14.6	7.3	0.0	0.0	0.0	0.0
15. Synthetic Fibres	3.1	4.3	26.1	21.7	13.0	21.7	8.7	4.3	0.0	0.0	0.0	0.0
16. Tea Plantation	7.3	16.7	18.5	25.9	13.0	18.5	1.9	1.9	1.9	0.0	1.9	0.0
17. Treding	2.5	31.6	0.0	26.3	5.3	31.6	0.0	5.3	0.0	0.0	0.0	0.0
18. Transport	2.7	20.0	5.0	15.0	15.0	10.0	10.0	10.0	15.0	0.0	0.0	0.0
	100.0	11.0	10.2	16.4	19.9	21.0	10.2	5.8	2.7	1.3	0.8	0.5

EXHIBIT 9

Industrial Classification of DL/TA (1980-81)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	67.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	37.5	12.5	25.0	6.2	6.3	0.0	6.3	0.0	0.0	0.0	6.2
3. Chemicals	12.5	62.4	19.4	9.7	1.1	2.2	2.2	0.0	1.1	1.1	0.0	1.1
4. Coffee	4.7	82.9	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Cotton Spng.	4.8	36.1	33.3	16.7	11.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0
6. Cotton Sp. &Wv	12.2	44.0	34.1	12.1	5.5	1.1	0.0	0.0	1.1	0.0	1.1	1.1
7. Electric Equipment	8.5	68.3	15.9	6.3	3.2	1.6	0.0	0.0	1.6	0.0	1.6	1.6
8. Electricity	1.2	44.4	44.4	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	73.3	6.7	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	55.6	26.3	8.1	5.1	2.0	0.0	1.0	2.0	0.0	0.0	0.0
11. Jute	3.0	68.2	13.6	13.6	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
12. Metal Alloys	9.7	55.6	16.7	9.7	9.7	4.2	1.4	0.0	0.0	1.4	1.4	0.0
13. Paper & Pulp	4.4	30.3	27.3	21.1	12.1	3.0	0.0	3.0	0.0	3.0	0.0	0.0
14. Sugar & Breweries	5.5	75.6	12.2	2.4	2.4	4.9	2.4	0.0	0.0	0.0	0.0	0.0
15. Synthetic Fibres	3.1	52.2	39.1	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. Tea Plantation	7.3	74.1	13.0	5.6	1.9	3.7	0.0	1.9	0.0	0.0	0.0	0.0
17. Trading	2.5	84.2	10.5	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. Transport	2.7	35.0	5.0	20.0	5.0	10.0	5.0	20.0	0.0	0.0	0.0	0.0
	100.0	58.1	21.4	10.0	4.4	2.6	0.8	1.1	0.7	0.4	0.4	0.5

EXHIBIT 10

Industrial Classifiction of LD/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	0.0	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	50.0	12.5	12.5	18.8	0.0	6.2	0.0	0.0	0.0	0.0	0.0
3. Chemicals	12.5	51.6	19.4	7.5	11.8	6.5	2.2	0.0	1.1	0.0	0.0	0.0
4. Coffee	4.7	97.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Cotton Spngg.	4.8	44.4	36.1	11.1	2.8	0.0	5.6	0.0	0.0	0.0	0.0	0.0
6. Cotton Sp. & Wvg.	12.2	68.1	27.5	3.3	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
7. Electric Equipment	8.5	63.5	15.9	14.3	1.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0
8. Electricity	1.2	0.0	33.3	44.4	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	92.9	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	62.6	19.2	8.1	5.1	4.0	1.0	0.0	0.0	0.0	0.0	0.0
11. Jute	3.0	90.9	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12. Metal Alloys	9.7	54.2	26.4	11.1	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
13. Paper & Pulp	4.4	30.3	39.4	12.1	12.1	0.0	6.1	0.0	0.0	0.0	0.0	0.0
14. Sugar & Breweries	5.5	82.9	14.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. Synthetic Fibres	3.1	39.1	39.1	8.7	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. Tea Plantation	7.3	87.0	11.1	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. Trading	2.5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. Transport	2.7	35.0	5.0	5.0	20.0	5.0	10.0	5.0	15.0	0.0	0.0	0.0
	100.0	63.0	19.9	7.4	5.4	2.2	1.5	0.1	0.5	0.0	0.0	0.0

EXHIBIT 11

Industrial Classification of LD/TA (1980-81)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	25.0	37.5	31.2	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0
3. Chemicals	12.5	14.0	26.9	31.2	15.0	5.4	3.2	1.1	1.1	1.1	0.0	1.1
4. Coffee	4.7	77.1	11.4	2.9	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
5. Cotton Spngg.	4.8	19.4	33.3	38.9	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0
6. Cotton Sp.& Weaving	12.2	8.8	13.2	35.2	24.1	11.0	2.2	2.2	1.1	0.0	1.1	1.1
7. Electric Equipment	8.5	11.1	25.4	17.5	22.2	15.9	0.0	6.3	0.0	0.0	0.0	0.0
8. Electricity	1.2	55.5	44.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	21.4	7.1	21.4	28.6	14.3	7.1	0.0	0.0	0.0	0.0	0.0
10. General Engg.	13.3	17.2	25.2	31.3	17.2	6.1	2.0	0.0	0.0	0.0	0.0	0.0
11. Jute	3.0	9.1	4.5	40.9	27.3	4.5	4.5	9.1	0.0	0.0	0.0	0.0
12. Metal Alloys	9.7	13.1	20.8	23.6	18.0	9.7	6.9	2.8	1.4	0.0	1.4	1.4
13. Paper & Pulp	4.4	12.1	33.3	36.4	12.1	3.0	3.0	0.0	0.0	0.0	0.0	0.0
14. Sugar & Breweries	5.5	41.5	21.9	17.1	4.9	9.7	2.4	0.0	2.4	0.0	0.0	0.0
15. Synthetic Fibres	3.1	17.4	17.4	43.5	8.7	4.3	4.3	0.0	4.3	0.0	0.0	0.0
16. Tea Plantation	7.3	33.3	13.0	9.2	25.9	13.0	3.7	0.0	1.9	0.0	0.0	0.0
17. Trading	2.5	31.6	31.6	21.0	10.5	0.0	5.3	0.0	0.0	0.0	0.0	0.0
18. Transport	2.7	65.0	15.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100.0	23.3	21.8	26.0	16.1	7.5	2.8	1.5	0.8	0.1	0.2	0.6

EXHIBIT 12

Industrial Classification of LA/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	66.7	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	12.5	25.0	37.5	18.8	0.0	6.3	0.0	0.0	0.0	0.0	0.0
3. Chemicals	12.5	21.5	24.7	16.1	19.4	13.8	2.2	3.2	0.0	1.1	0.0	1.1
4. Coffee	4.7	62.9	11.4	2.8	11.4	5.7	2.8	2.8	0.0	0.0	0.0	0.0
5. Cotton Spngg.	4.8	8.3	30.5	25.0	22.2	13.9	0.0	0.0	0.0	0.0	0.0	0.0
6. Cotton Sp. & Weaving	12.2	4.4	18.7	29.6	23.1	18.7	4.4	1.1	0.0	0.0	0.0	0.0
7. Electric Equipment	8.5	11.1	22.2	11.1	20.6	22.2	6.3	6.3	0.0	0.0	0.0	0.0
8. Electricity	1.2	33.3	44.4	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	14.3	14.3	14.3	42.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	18.2	21.2	23.2	17.2	15.1	2.0	0.0	1.0	2.0	0.0	0.0
11. Jute	3.0	0.0	4.5	9.1	50.0	31.8	4.5	0.0	0.0	0.0	0.0	0.0
12. Metal Alloys	9.7	12.5	12.5	25.0	20.8	9.7	11.1	4.2	2.0	1.4	0.0	0.0
13. Paper & Pulp	4.4	30.3	30.3	12.1	9.1	3.0	3.0	12.1	0.0	0.0	0.0	0.0
14. Sugar & Breweries	5.5	14.6	14.6	14.6	29.3	17.1	9.7	0.0	0.0	0.0	0.0	0.0
15. Synthetic Fibres	3.1	34.8	26.1	17.4	13.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0
16. Tea Plantation	7.3	24.1	20.4	25.9	11.1	11.1	3.7	0.0	1.8	0.0	1.8	0.0
17. Trading	2.5	31.6	5.3	21.0	10.5	26.3	0.0	5.3	0.0	0.0	0.0	0.0
18. Transport	2.7	80.0	0.0	15.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100.0	20.3	19.4	19.9	19.2	13.3	4.2	2.3	0.5	0.5	0.1	0.1

EXHIBIT 13

Industrial Classification of SC/TA (1980-81)

Type of Industry	% of Cos.	Leverage Range % 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
1. Aluminium	0.4	0.0	67.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	18.8	6.2	25.0	43.8	0.0	0.0	6.3	0.0	0.0	0.0	0.0
3. Chemicals	12.5	16.1	40.9	26.9	8.6	3.2	1.1	1.1	0.0	1.1	0.0	1.1
4. Coffee	4.7	77.1	17.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
5. Cotton Spngg.	4.8	36.1	38.9	22.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. Cotton Sp. & Weaving	12.2	7.7	26.4	26.4	20.9	9.9	1.1	4.4	1.1	0.0	0.0	2.2
7. Electric Equipment	8.5	4.8	34.9	41.3	9.5	6.3	1.6	0.0	1.6	0.0	0.0	0.0
8. Electricity	1.2	33.3	55.6	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	42.9	21.4	14.3	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	11.1	38.4	27.3	15.2	3.0	3.0	2.0	0.0	0.0	0.0	0.0
11. Jute	3.0	0.0	18.2	18.2	18.2	18.2	9.1	4.5	4.5	4.5	0.0	4.5
12. Metal Alloys	9.7	16.7	40.3	29.2	8.3	4.2	0.0	0.0	1.4	0.0	0.0	0.0
13. Paper & Pulp	4.4	24.2	39.4	12.1	12.1	9.1	3.0	0.0	0.0	0.0	0.0	0.0
14. Sugar Breweries	5.5	12.2	29.3	24.4	24.4	7.3	0.0	2.4	0.0	0.0	0.0	0.0
15. Synthetic Fibres	3.1	21.7	52.2	17.4	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3
16. Tea Plantation	7.3	25.9	40.7	25.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17. Trading	2.5	21.0	10.5	36.8	10.5	10.5	5.3	0.0	5.3	0.0	0.0	0.0
18. Transport	2.7	65.0	15.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100.0	20.1	33.6	24.9	12.2	4.7	1.3	1.3	0.7	0.3	0.0	0.8

EXHIBIT 14

Industrial Classification of SC/TA (1973-74)

Type of Industry	% of Cos.	Leverage Range 0%–10%	10%–20%	20%–30%	30%–40%	40%–50%	50%–60%	60%–70%	70%–80%	80%–90%	90%–100%	>100%
1. Aluminium	0.4	67.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Cement	2.2	50.0	37.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Chemicals	12.5	41.9	41.9	12.9	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
4. Coffee	4.7	80.0	8.6	8.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Cotton Spngg.	4.8	36.1	44.4	16.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. Cotton Spng. & Weaving	12.2	13.2	59.3	18.7	7.7	0.0	0.0	0.0	0.0	1.1	0.0	0.0
7. Electric Equipment	8.5	12.7	39.7	30.2	9.5	3.2	3.2	0.0	1.6	0.0	0.0	0.0
8. Electricity	1.2	55.6	44.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Food Products	1.9	14.3	14.3	64.3	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Gen. Engg.	13.3	20.2	32.3	27.3	9.1	8.1	1.0	2.0	0.0	0.0	0.0	0.0
11. Jute	3.0	0.0	13.6	27.3	31.8	22.7	4.5	0.0	0.0	0.0	0.0	0.0
12. Metal Alloys	9.7	31.9	45.8	18.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Paper & Pulp	4.4	39.4	42.4	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. Sugar & Breweries	5.5	29.3	43.9	14.6	9.8	0.0	0.0	0.0	0.0	0.0	2.4	0.0
15. Synthetic Fibres	3.1	34.8	56.5	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16. Tea Plantation	7.3	31.5	31.5	16.7	16.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
17. Trading	2.5	21.1	15.8	21.1	21.1	5.3	10.5	5.3	0.0	0.0	0.0	0.0
18. Transport	2.7	55.0	30.0	5.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	100.0	30.3	38.9	19.1	7.5	2.6	0.8	0.4	0.1	0.1	0.1	0.0

EXHIBIT 15

Leverage (TL/TA) Trends

Type of Industry	Trend	% of Cos.	High negative	Medium negative	Low negative	Neutral	Low positive	Medium positive	High positive
			-5.0	-3 to -5	-3 to -1	-1 to 1	1 to 3	3 to 5	>5.0
1.	Aluminium	0.4	0.0	0.0	33.3	66.7	0.0	0.0	0.0
2.	Cement	2.2	0.0	0.0	0.0	25.0	18.8	18.8	37.5
3.	Chemicals	12.5	1.1	4.3	15.1	46.2	22.6	1.1	9.7
4.	Coffee	4.7	2.9	0.0	2.9	31.4	31.4	17.1	14.3
5.	Cotton Spinning	4.8	2.8	5.6	25.0	25.0	33.3	5.6	2.8
6.	Cotton Spinning & Weaving	12.2	2.2	1.1	6.6	42.9	22.0	9.9	15.4
7.	Electric Equipment	6.5	0.0	1.6	14.3	41.3	28.6	3.2	11.1
8.	Electricity	1.2	0.0	0.0	0.0	77.8	22.2	0.0	0.0
9.	Food Products	1.9	0.0	0.0	28.6	35.7	28.6	7.1	0.0
10.	General Engineering	13.3	1.0	4.0	14.1	37.4	30.3	6.1	7.1
11.	Jute	3.0	4.5	4.5	4.5	31.8	27.3	4.5	22.7
12.	Metal Alloys	9.7	0.0	6.9	5.6	41.7	23.6	13.9	8.3
13.	Paper & Pulp	4.4	6.1	3.0	6.1	39.4	18.2	6.1	21.2
14.	Sugar & Breweries	5.5	0.0	7.3	2.4	36.6	26.8	14.6	12.2
15.	Synthetic Fibres	3.1	4.3	4.3	13.0	34.8	26.1	13.0	4.3
16.	Tea Plantation	7.3	1.9	5.6	5.6	13.0	29.6	27.8	16.7
17.	Trading	2.5	10.5	10.5	21.1	31.6	21.1	5.3	0.0
18.	Transport	2.7	5.0	0.0	15.0	55.0	15.0	5.0	5.0
		100.0	1.9	3.8	10.6	37.7	25.6	9.3	11.2

EXHIBIT 16

Leverage (TL/TA) Variability

Type of Industry	Variability	% of Cos.	Low 0 - 2	Low Medium 2 - 4	High Medium 4 - 6	High 6-10	Very High >10
1.	Aluminium	0.4	0.0	0.0	66.7	0.0	33.3
2.	Cement	2.2	0.0	0.0	12.5	18.8	68.7
3.	Chemicals	12.5	0.0	20.4	9.7	21.5	48.4
4.	Coffee	4.7	2.8	0.0	8.6	22.9	65.7
5.	Cotton Spinning	4.8	0.0	5.6	8.3	19.4	66.7
6.	Cotton Spinning & Weaving	12.2	2.2	9.9	16.5	26.4	45.1
7.	Electric Equipment	8.5	1.6	15.9	19.0	25.4	38.1
8.	Electricity	1.2	11.1	22.2	0.0	55.6	11.1
9.	Food Products	1.9	0.0	14.4	14.3	21.4	50.0
10.	General Engineering	13.3	0.0	10.1	16.2	27.3	46.5
11.	Jute	3.00	0.0	9.1	13.6	18.2	59.1
12.	Metal Alloys	9.7	0.0	4.2	20.8	22.2	52.8
13.	Paper & Pulp	4.4	0.0	3.0	27.3	18.2	51.5
14.	Sugar & Breweries	5.5	0.0	7.3	7.3	31.7	53.7
15.	Synthetic & Fibres	3.1	0.0	8.7	13.0	30.4	47.8
16.	Tea Plantation	7.3	0.0	3.7	0.0	20.4	75.9
17.	Trading	2.5	0.0	10.5	15.8	26.3	47.4
18.	Transport	2.7	0.0	10.0	10.0	25.0	55.0
		100.0	0.7	9.6	13.7	24.2	51.8

EXHIBIT 17

Loverage Averages (1980-81)

Type of Industry	SC/TA	LA/TA	LD/TA	$\frac{LA + LD}{TA}$	$\frac{LA + LD + SC}{TA}$	TL/TA
1. Aluminium	21.04	14.65	8.33	22.98	44.02	53.15
2. Cement	27.28	17.45	27.56	45.01	72.28	97.27
3. Chemicals	21.40	25.22	12.88	38.10	59.50	69.58
4. Coffee	10.03	6.83	2.81	9.63	19.67	50.78
5. Cotton Spinning	14.39	18.78	15.52	34.30	48.68	62.55
6. Cotton Spinning and Weaving	29.04	31.55	17.03	48.58	77.62	82.66
7. Electric Equipment	23.50	28.98	12.71	41.69	65.19	81.49
8. Electricity	13.16	9.36	14.52	23.88	37.05	66.99
9. Food Products	19.26	26.52	6.05	32.57	51.83	64.66
10. Gen. Engg.	22.60	23.50	12.93	36.43	59.03	75.70
11. Jute	42.85	32.08	9.93	42.02	84.87	89.08
12. Metal Alloys	20.41	29.69	15.03	44.72	65.13	76.89
13. Paper & Pulp	19.71	22.44	21.35	43.79	63.51	70.94
14. Sugar & Breweies	24.33	17.82	8.22	26.03	50.36	71.83
15. Synthetic Fibres	15.02	23.80	11.02	34.82	49.84	60.74
16. Tea Plantation	16.68	23.18	8.24	31.42	48.10	72.68
17. Trading	25.89	17.25	3.59	20.84	46.73	64.90
18. Transport	10.90	8.43	27.70	36.17	47.06	59.73
All Industries:						
Average	20.97	20.97	13.08	34.05	55.03	70.65
Standard Deviation	7.50	7.52	6.86	9.89	14.88	11.66
Coefficient of Variation %	35.8	35.9	52.4	29.0	27.0	16.5

EXHIBIT 18

Leverage Averages (1973-74)

Type of Industry	SC/TA	LA/TA	LD/TA	(LA + LD)/TA	(LA + LD + SC)/TA	TL/TA
1. Aluminium	7.89	13.75	22.52	36.27	44.16	50.20
2. Cement	12.15	24.15	16.23	40.38	52.53	57.87
3. Chemicals	13.12	25.46	14.54	40.00	53.12	61.16
4. Coffee	7.52	13.90	1.24	15.14	22.66	40.57
5. Cotton Spinning	13.46	24.31	14.79	39.10	52.56	63.14
6. Cotton Spinning & Weaving	17.26	30.12	8.52	38.64	55.90	68.32
7. Electric Equipment	21.52	31.43	9.57	41.00	62.52	71.59
8. Electricity	10.07	12.02	23.09	35.11	45.18	64.23
9. Food Products	21.93	27.28	4.83	32.10	54.03	63.51
10. Gem. Engg.	21.63	26.29	10.37	36.65	58.29	67.37
11. Jute	32.37	36.39	4.49	40.89	73.26	82.65
12. Metal Alloys	14.94	32.13	10.95	43.09	58.01	66.83
13. Paper & Pulp	12.67	22.90	16.94	39.84	52.51	60.50
14. Sugar & Breweries	17.28	28.99	3.56	32.55	49.83	62.27
15. Synthetic Fibres	11.99	16.82	14.57	31.39	43.38	56.97
16. Tea Plantation	17.83	24.27	4.04	28.31	46.14	56.32
17. Trading	28.43	26.34	0.68	27.02	55.45	73.90
18. Transport	11.41	6.45	32.15	38.60	50.01	56.55
All Industries:						
Average	16.30	23.50	11.84	35.34	51.64	62.44
Standard Deviation	6.57	7.70	8.20	6.62	9.87	9.01
Coefficient of Variation (%)	40.3	32.8	69.3	18.7	19.1	14.4

EXHIBIT 19

Industrial Variability of Leverage (1980-81)

Coefficient of variation %)

Type of Industry	SC/TA	LA/TA	LD/TA	LA+LD/TA	$\frac{LA+LD+SC}{TA}$	TL/TA
1. Aluminium	12.17	62.79	78.85	68.47	30.66	14.38
2. Cement	53.83	69.82	124.39	75.35	61.79	50.00
3. Chemicals	74.14	74.56	148.58	75.58	61.17	45.06
4. Coffee	163.24	163.80	191.74	129.37	112.18	37.94
5. Cotton Spnning	54.68	48.80	74.84	35.85	31.19	25.55
6. Cotton Spn. & Weaving	62.26	71.90	133.93	74.57	63.93	51.30
7.Electric Equipment	50.40	65.26	174.95	72.40	50.65	35.92
8. Electricity	55.21	69.95	84.93	67.59	48.51	6.87
9. Food Products	58.82	59.08	132.46	47.68	22.79	18.10
10. Gen. Engg.	55.15	70.26	110.89	64.59	50.92	35.43
11. Jute	56.88	46.57	109.90	42.60	42.94	36.00
12. Metal Alloys	56.69	68.97	124.96	62.02	45.77	36.85
13. Paper & Pulp	63.99	50.88	81.71	41.84	34.25	26.61
14. Sugar & Breweries	56.51	98.21	159.98	76.46	50.32	37.50
15. Synthetic Fibres	57.88	71.00	73.03	50.54	39.77	30.53
16. Tea Plantation	54.15	77.19	156.62	59.08	45.17	34.89
17. Trading	70.09	73.83	180.36	67.70	49.46	38.74
18. Transport	85.84	137.47	90.47	86.92	63.71	46.76

EXHIBIT 20

Industrial Variability of Leverage (1973-74)

(Coefficient of Variation %)

Type of Industry	SC/TA	LA/TA	LD/TA	LA+LD/TA	$\frac{LA+LD+SC}{TA}$	TL/TA
1. Aluminium	25.88	72.61	30.68	29.94	28.66	72.61
2. Cement	46.47	47.71	92.36	49.43	36.92	47.71
3. Chemicals	56.58	79.44	115.53	55.01	44.13	79.44
4. Coffee	93.20	132.32	275.09	128.37	106.63	132.32
5. Cotton Spinning	51.57	50.19	90.95	34.76	26.12	50.19
6. Cotton Spn. & Weaving	63.27	42.90	95.09	35.27	35.04	42.90
7, Electric Equipment	59.82	55.80	119.45	53.57	32.27	55.80
8. Electricity	29.74	55.10	33.60	20.63	16.13	55.10
9. Food Products	23.16	50.17	163.19	57.51	32.11	50.17
10. Gen. Engg.	61.43	64.16	122.96	58.10	41.34	64.16
11. Jute	33.54	22.84	98.68	21.14	14.57	22.84
12. Metal Alloys	49.14	58.57	110.06	50.13	41.64	58.57
13. Paper & Pulp	50.41	87.63	80.15	57.98	49.58	87.63
14. Sugar & Breweries	87.03	56.07	145.28	53.65	41.09	56.07
15. Synthetic Fibres	52.35	83.64	77.92	52.42	42.80	83.64
16. Tea Plantation	61.01	76.90	127.75	68.76	46.94	76.90
17. Trading	62.96	74.04	231.92	71.81	41.93	74.04
18. Transport	88.65	176.27	84.38	65.43	49.87	176.27

EXHIBIT 21

Classification of Leverage (TL/TA) By Size (1973-74)

Sales (Rs Crs)	% of Cos.	% 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
0.0 - 1.00	22.0	3.7	4.9	8.5	8.5	16.5	16.5	15.9	10.4	6.7	1.2	7.3
1.0 -5.0	35.4	0.0	0.3	2.3	2.7	11.4	16.7	27.0	22.0	9.5	4.9	3.0
5.0 -10.0	19.2	0.0	0.0	0.7	6.3	7.0	18.9	25.2	28.0	9.1	2.1	2.8
10.0 -25.0	13.6	0.0	0.0	0.0	5.9	55.0	9.9	40.6	27.7	7.9	2.0	1.0
25.0-50.0	6.5	0.0	0.0	0.0	10.2	12.2	28.6	28.6	14.3	2.0	2.0	0.0
50.0-100.0	2.2	0.0	0.0	0.0	0.0	31.2	6.3	25.0	31.2	6.3	0.0	0.0
>100.0	1.0	0.0	0.0	0.0	12.5	0.0	25.0	25.0	25.0	0.0	0.0	12.5
		0.8	1.2	2.8	5.7	11.2	16.8	26.1	21.1	7.9	2.8	3.5

EXHIBIT

Classification of Leverage (TL/TA) By Size (1980-81)

Sales (Rs Crs.)	% of Cos.	% 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% > 100
0.0-1.00	11.5	3.2	4.2	5.3	7.4	7.4	9.5	13.7	10.5	5.3	8.4	14.7
1.0-5.0	22.0	0.0	1.2	0.6	3.7	9.1	16.5	19.5	16.5	12.8	5.5	14.6
5.0 -10.0	14.5	0.0	0.0	0.9	0.9	4.6	15.7	26.9	31.5	6.5	3.7	9.3
10.0-25.0	25.0	0.0	0.0	0.5	1.6	4.8	11.8	21.0	34.4	10.8	7.0	8.1
25.0-50.0	13.5	0.0	1.0	3.0	2.0	6.0	17.0	19.0	30.0	11.0	3.0	8.0
50.0-100.0	8.2	0.0	0.0	1.6	6.6	4.9	21.3	39.3	24.5	0.0	0.0	1.6
> 100.0	5.3	0.0	0.0	2.6	5.1	7.7	20.5	23.0	25.6	12.8	2.6	0.0
		0.4	0.9	1.7	3.4	6.5	15.2	22.3	25.6	9.3	5.1	9.7

EXHIBIT 23

Classification of Leverage By Profitability (NS/TA)
(1973-74)

NS/TA	% of Cos.	0–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90	90–100	>100
0.0 –0.5	12.7	6.4	6.4	5.3	5.3	8.5	17.0	14.9	19.1	7.4	2.1	7.4
0.5 – 1.0	36.3	0.0	1.1	4.8	9.3	15.2	16.3	27.0	14.4	6.3	1.9	3.7
1.0 – 1.5	30.0	0.0	0.0	0.9	3.6	9.9	15.7	28.7	26.9	7.6	4.0	2.7
1.5 – 2.5	17.5	0.0	0.0	0.7	3.1	8.5	19.2	28.5	26.9	10.8	1.5	0.8
2.5 – 5.0	2.4	0.0	0.0	0.0	0.0	0.0	27.8	22.2	11.1	11.1	16.7	11.1
> 5.0	1.1	0.0	0.0	0.0	0.0	12.5	0.0	25.0	37.5	25.0	0.0	0.0
	100.0	0.8	1.2	2.8	5.6	11.2	16.8	26.1	21.1	7.9	2.8	3.5

EXHIBIT 24

Classification of TL/TA By Profitability (NS/TA)(1980-81)

NS/TA	% of Cos.	0–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80	80–90	90–100	>100
0.0 – 0.5	7.5	5.4	7.1	3.6	7.1	7.1	5.4	17.9	16.1	10.7	5.4	14.3
0.5 – 1.0	23.6	0.0	0.6	2.3	4.6	9.1	18.3	1.7	19.1	8.6	6.9	11.4
1.0 – 1.5	33.4	0.0	0.4	1.6	2.8	5.6	18.5	25.8	27.8	7.3	2.4	7.7
1.5 – 2.5	28.5	0.0	0.4	0.9	2.4	5.2	12.9	21.7	30.2	11.3	5.7	9.9
2.5 – 5.0	5.6	0.0	0.0	2.4	2.4	4.8	9.5	26.2	28.6	7.1	11.9	7.1
> 5.0	1.3	0.0	0.0	0.0	0.0	10.0	20.0	10.0	20.0	30.0	0.0	10.0
	100.0	0.4	0.9	1.7	3.4	6.5	15.2	22.2	25.6	9.3	5.1	9.7

EXHIBIT 25

Classification of Leverage (TL/TA) By Profitability (ROCE) (1973-74)

ROCE %	% of Cos.	% 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
< 0.0	9.4	2.9	2.9	5.7	2.9	12.6	11.4	7.1	17.1	12.6	8.6	15.7
0.0-5.0	12.4	4.3	2.2	3.3	14.1	6.5	8.7	23.9	20.7	8.7	4.3	3.3
5.0-10.0	25.8	0.0	1.0	2.6	4.2	13.5	18.2	25.0	23.4	8.9	1.6	1.6
10.0-15.0	30.6	0.0	0.0	3.5	4.4	9.7	12.8	33.9	22.9	7.9	1.8	3.1
15.0-20.0	14.3	0.0	0.9	0.0	5.7	12.3	21.7	28.3	22.6	5.7	2.8	0.0
20.0-30.0	5.9	0.0	2.3	2.3	6.8	11.4	36.4	25.0	6.8	2.3	2.3	4.5
> 30.0	1.5	0.0	8.3	0.0	0.0	16.7	33.3	8.3	25.0	0.0	8.3	0.0
	100.0	0.8	1.2	2.8	5.6	11.2	16.6	26.1	21.2	7.9	3.0	3.5

EXHIBIT 26

Classification of Leverage (TL/TA) By Profitability (Roce)(1980-81)

ROCE %	% of Cos.	% 0-10	% 10-20	% 20-30	% 30-40	% 40-50	% 50-60	% 60-70	% 70-80	% 80-90	% 90-100	% >100
< 0.0	8.1	0.0	3.3	0.0	0.0	1.7	8.3	5.0	21.7	10.0	10.0	40.0
0 - 5	7.5	5.4	0.0	3.6	5.4	8.9	8.9	8.9	12.5	10.7	12.5	23.2
5 - 10	12.5	0.0	2.1	4.3	4.3	10.8	21.5	22.6	16.1	10.8	2.2	5.4
10-15	28.3	0.0	1.4	0.9	4.3	6.7	13.3	29.0	31.9	5.7	2.9	3.8
15 - 20	24.8	0.0	0.0	1.1	4.3	4.9	16.3	27.2	28.8	11.4	3.3	2.7
20 - 30	12.9	0.0	0.0	1.0	0.0	9.4	20.8	20.8	26.0	11.5	6.3	4.2
> 30	5.9	0.0	0.0	4.5	2.3	0.0	11.4	11.4	20.5	9.1	11.4	29.5
	100.0	0.4	0.9	1.7	3.4	6.5	15.2	22.2	25.4	9.4	5.1	9.7

EXHIBIT 27

Classification of Leverage (TL/TA) By Growth

Growth %	% of Cos.	0%–10	10%–20	20%–30	30%–40	40%–50	50%–60	60%–70	70%–80	80%–90	90%–100	>100%
< -5	3.9	10.3	3.4	3.4	10.3	3.4	10.3	6.9	0.0	6.9	10.3	34.5
-5 to -3	1.1	0.0	0.0	0.0	0.0	0.0	12.5	0.0	50.0	0.0	0.0	37.5
-3 to -1	0.9	0.0	0.0	14.3	0.0	0.0	28.6	28.6	0.0	14.3	14.3	0.0
-1 to 1	1.1	0.0	0.0	0.0	12.5	12.5	0.0	0.0	25.0	0.0	12.5	37.5
1 to 3	3.2	0.0	0.0	0.0	4.2	4.2	20.8	12.5	12.5	8.3	4.2	33.3
3 to 5	2.0	0.0	0.0	0.0	0.0	0.0	13.3	6.7	26.7	13.3	13.3	26.7
5 to 10	14.8	0.0	0.9	1.8	3.6	6.4	10.9	23.6	20.9	11.8	7.3	12.7
1 to 20	49.4	0.0	0.5	1.6	3.0	6.8	15.8	15.8	28.9	10.6	4.1	4.4
> 20	23.6	0.0	1.7	1.7	2.9	7.4	17.1	24.0	26.9	6.3	4.0	8.0

ANNEXTURE 1

List of Companies

Sr. No.	Name of Company
1.	The Andhra Valley Power Supply Co. Ltd.
2.	Asia Automotive Ltd.
3.	Blow Plast Ltd.
4.	Britannia Industries Ltd.
5.	Ciba-Geigy of India Ltd.
6.	Colour-Chem Ltd.
7.	Coromandel Fertilizers Ltd.
8.	Engineering Construction Ltd
9.	Food Specialities Ltd
10.	Good Year India Ltd.
11.	Greaves Cotton Ltd.
12.	Guest Keen Williams Ltd.
13.	Hindustan Lever Ltd.
14.	H. M. M Ltd.
15.	Indian Dyestuff Industries Ltd
16.	The India Cements Ltd.
17.	The Indian Tube Co. Ltd
18.	Jyoti Ltd
19.	Larsen and Tubro Ltd.
20.	Lucas - Tvs Ltd.
21.	Madura Coats Ltd
22.	Metal Box India Ltd.
23.	Peico Electronics & Electricals Ltd
24.	Ranbaxy Laboratories Ltd

Annexture 1 continued:

Sr. No.	Name of Company
25	Rustom Mills & Industries Ltd.
26	Shaw Wallace & Co. Ltd.
27	Southern Petrochemical Industries Corporation Ltd.
28	The Tata Oil Mills Co. Ltd.
29	Tube Investments of India Ltd.
30	Voltas Ltd.

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