

Impact of Cash Flow Coverage, Debt Service & Current Ratio on Capital Structure Decisions: Empirical Evidence from the Indian Corporate Sector

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Abstract- This empirical study examines the capital structure decisions of developing countries through a case study of Indian corporate sector by classifying the capital structure of 298 out of top 500 private sector manufacturing firms selected on the basis of sales turnover for the year 2004-2005 which covers a time span of eleven years commencing from 1995-96 to 2005-06 by cash flow coverage ratio, debt service ratio and current ratio. The study reveals that larger number of companies is distributed, for all the variables under study, in 0-100 percent capital structure range during 1995-96 (55 to 55.93 percent) and 2005-06 (62.68 to 63.29 percent), respectively. It is found that lesser number of companies is distributed, for all the variables under study, in 200-300 percent and more than 300 percent capital structure ranges during 1995-96 (3.93 to 4.06 percent each) and 2005-06 (7.32 to 7.39 percent and 3.48 to 3.52 percent), respectively. Overall, there is a shifting of companies from higher capital structure ranges towards lower capital structure ranges during the study period. Cash flow coverage ratio, debt-service ratio and current ratio are showing negative relationship with capital structure, implying less use of debt when these variables attain a higher value during 1995-96 and 2005-06, respectively.

Key Words: Capital Structure ; Debt Service ; Current Ratio; Shrinkage

1. INTRODUCTION

Capital structure decisions are significant managerial decisions which affect the shareholders consequently the value of a firm also. The company will have to plan its capital structure initially at the time of its promotion. Subsequently, whenever funds have to be raised to finance investments, a capital structure decision is involved. Thus, the question of the optimal capital structure of the business firm has attracted considerable attention by the economists in recent years. There has been an inconclusive debate on the issue of the relationship between financing decision and the valuation of firm. Both theoretical and empirical researches yield contradictory results. Theories suggest that firms select capital structures depending on characteristics that determine various costs and benefits associated with debt equity financing. The empirical work in this area has lagged behind the theoretical work, perhaps because the relevant firm attributes are expressed in terms of fairly abstract concepts that are not directly observable. The existence of an optimum capital structure is not accepted by all. There exist two extreme views and a middle position. David Durand identified the two extreme views - the net income and net operating income approaches. If the net income approach is valid, leverage is a significant variable and financing decisions have an important effect on the value of a firm. On the other hand, if the net operating income approach is correct, then the financing decision should not be of great concern to the financing manager, as it does not matter in the valuation of

a firm. Modigliani and Miller (MM) support the net operating income approach by providing logically consistent behavioral justifications in its favour. They deny the existence of an optimum capital structure. Between the two extreme views, we have the middle position or intermediate version advocated by the traditional writers. Thus, there exists an optimum capital structure at which the cost of capital is minimum. The logic of this view is not very sound. The MM position changes when corporate taxes are assumed. The interest tax shield resulting from the use of debt adds to the value of the firm. This advantage reduces when personal income taxes are considered. The primary aim of corporate management is to maximize shareholders' value and the value of a firm in a legal and ethical manner. So, a financial manager would consider a number of factors to set an optimal capital structure for a firm giving considerable weight to earning rate, collateral value of assets, age, cash flow coverage ratio, non debt tax shield, size (net sales), dividend payout ratio, debt service ratio, cost of borrowing, corporate tax rate, current ratio, growth rate, operating leverage and uniqueness (selling cost/sales) etc. However, the choice between debt and equity from the point of view of shareholders and lenders is an important one and it will be useful to list the special advantages of either form of capital relative to the other.

- The greater use of debt, where the interest rate is lower than the average rate of return on the investment, increases the net return to equity shareholders.

- Higher debt does not impair the control of shareholders over the enlarged operations of the company/firm.
- Debt is cheaper source of finance, cost of debt is lower than cost of preference share capital as well as equity share capital because debt holders' first claim on the firm's assets at time of its liquidation, payment of interest before any dividend is paid to preference and equity shareholders, and interest is an item chargeable to profits of a company/firm.
- Deductibility of the interest on debt before computing profits charge to tax, as against payment of dividends out of profits after tax, implies an effective lowering of the tax rate on a company/firm more or less in proportion to the extent to which debt is substituted for equity in the company's financing pattern.
- But it is not desirable to resort to excessive debt financing because the excessive proportion of debt in the capital structure increases the financial risks of the firm. This is because debt being a contractual obligation. The same along with interest must be paid out ultimately. Any failure in doing so shall result in technical insolvency if not a real one. Further, the use of debt capital will not automatically improve the overall return of the firm. It will increase the return if the firm's rate of return on assets is higher than the cost of debt capital. Therefore, in order to increase the advantage of debt capital and at the same time to save the firm from the financial and other risks, it is desirable to have a reasonable debt equity mix in the total capital structure. Thus, the decision regarding debt equity mix in the capital structure of a firm is of critical one and has to be approached with a great care. This paper is organized into five sections. Section I provides the introduction about the capital structure. Section II deals with selected variables, their definition and expected relationship with capital structure. Section III presents reports and analyses the empirical results of the study. Section IV summarizes and concludes the study.

2. VARIABLES, DEFINITION AND EXPECTED RELATIONSHIP WITH CAPITAL STRUCTURE

The following table exhibits selected variables to be used for examining capital structure decisions of the Indian Corporate Sector, their definition and expected relationship with capital structure.

Variables, Definition and Expected relationship with Capital Structure

Sr. No.	Variables	Definition	Expected Relationship
1	Cash Flow Coverage Ratio	Profits Before Tax, Interest & Depreciation/Total Assets	Negative
2	Debt Service	EBIT/Interest	Negative

	Ratio	Charges	
3	Current Ratio	Current Assets / Current Liabilities	Negative

3. EMPIRICAL RESULTS ON THE BASIS OF SELECTED VARIABLES

The following are empirical results of the present study:

3.1 CASH FLOW COVERAGE RATIO

It is evident from Table 1 & 2 that more than half of the companies during 1995-96 (57.04) and 2005-06 (54.89) are in two ranges of cash flow coverage ratios of 10-15 percent and 15-20 percent only. Cash flow coverage ratio wise, the highest number of companies is in 10-15 percent and 15-20 percent cash flow coverage ratio range during 1995-96 (28.52 percent each). However, during 2005-06 (28.67 percent), the highest number of companies is in 10-15 percent cash flow coverage ratio range. The lowest number of companies is in more than 35 percent cash flow coverage ratio range during 1995-96 (2.59 percent) and 2005-06 (3.50 percent), respectively. Under 10-15 percent cash flow coverage ratio, where highest number of companies is lying, it has been observed that 66.20 percent and 62.22 percent companies are in only one third capital structure ranges during 1995-96 and 2005-06, respectively. It has been observed that, in 1995-96, when the ability of a firm to meet its fixed payment obligations (interest) from its cash flow is considered in relation to capital structure, initially the spread of number of companies starts expanding over the entire capital structure ranges till 15-20 percent cash flow coverage ratio range. This spread, then, contracts fastly from higher capital structure ranges to the lower capital structure ranges (0-30 percent) under more than 35 percent cash flow coverage ratio range as all the companies' lie in this range. Similar trends have also been observed in 2005-06 except few exceptions. Capital structure range wise, it has been observed that the highest number of companies (7.78 percent) is in 100-110 percent capital structure range, followed by 7.41 percent companies in 60-70 percent capital structure range, while no company is lying in 260-270 percent, 280-290 percent and 290-300 percent capital structure ranges during 1995-96. During 2005-06, the highest number of companies (19.58 percent) is in 0-10 percent capital structure range, followed by 6.29 percent companies in 110-120 percent capital structure range. No company is lying in 270-280 percent and 280-290 percent capital structure ranges during this year also. It has been observed that largest number of companies is in 0-100 percent capital structure range during 1995-96 (minimum = 44.16 percent, maximum = 100 percent, industry average = 55.93 percent) and 2005-06 (minimum = 37.50 percent, maximum = 100 percent, industry average = 63.29 percent). With the rise in cash flow coverage ratio ranges, the number of companies is shifting to this broader capital

structure range and reaches to 90 percent and 100 percent in 30-35 percent and more than 35 percent cash flow coverage ratio ranges during 1995-96, and 93.94 percent in 20-25 percent and 100 percent each in 25-30 percent, 30-35 percent and more than 35 percent cash flow coverage ratio ranges during 2005-06, respectively. However, in 100-200 percent capital structure range, the number of companies reaches to nil in the last two and three ranges of cash flow coverage ratio during 1995-96 and 2005-06, respectively. The lowest number of companies is in 200-300 percent and more than 300 percent capital structure ranges during 1995-96 (4.07 percent each) and 2005-06 (7.34 percent and 3.50 percent), respectively. With the rise in cash flow coverage ratio ranges, the number of companies is declining in these two broader capital structure ranges and reaches to nil in the last half ranges of cash flow coverage ratio during 1995-96 and 2005-06, respectively. In nutshell, it has been observed that with the rise in cash flow coverage ratio ranges, the number of companies is moving from higher capital structure ranges towards lower capital structure ranges under the four broader categories of capital structure ranges during the period under study. Overall, rise in cash flow coverage ratio results in the shrinkage of number of capital structure ranges as well as decline in the distribution of companies to the higher capital structure ranges during the period under study. So, it emerges that at lower cash flow coverage ratio, there exists higher capital structure ranges and vice-versa, which represents negative relationship between capital structure and cash flow coverage ratio ranges during the study period. It shows that higher cash flows are generating higher internal resources implying less dependency of companies upon debt capital. That is why the companies are using lesser amount of debt for financing purposes.

3.2 DEBT SERVICE RATIO

It is evident from Table 3 & 4 in Annexure that three fifth of the companies during 1995-96 (60.15 percent) are in three ranges of debt service ratio of 100-200 percent, 200-300 percent and 300-400 percent, and slightly more than two fifth of the companies are in more than 1000 percent range of debt service ratio during 2005-06 (41.90 percent), respectively. Debt service ratio wise, the highest number of companies is in 200-300 percent debt service ratio range during 1995-96 (25.46 percent). However, during 2005-06 (41.90 percent), the highest number of companies is in more than 1000 percent debt service ratio range. The lowest number of companies is in 900-1000 percent debt service ratio range during 1995-96 (1.11 percent) and in 800-900 percent debt service ratio range during 2005-06 (2.11 percent), respectively. Under 200-300 percent and more than 1000 percent debt service ratio ranges, where highest number of companies is lying, it has been observed that 62.32 percent and 80.67 percent companies are in only six and five out of thirty one capital structure ranges during 1995-96 and 2005-06, respectively. It has been observed that, in 1995-96, when the firm's ability to serve

its fixed payment funding in relation to capital structure ranges is considered, initially the spread of number of companies starts expanding over the entire capital structure ranges. This spread, then, contracts fastly from higher capital structure ranges to the lower capital structure ranges with the rise in debt service ratio ranges of companies. Similar trend has been observed in 2005-06. Notably, the contraction in this year is somewhat slower. Capital structure range wise, it has been observed that the highest number of companies (8.12 percent) is in 100-110 percent capital structure range, followed by 7.38 percent companies in 60-70 percent capital structure range, while no company is lying in 260-270 percent, 280-290 percent and 290-300 percent capital structure ranges in the year 1995-96. During 2005-06, the highest number of companies (18.66 percent) is in 0-10 percent capital structure range, followed by 6.34 percent companies in 110-120 percent capital structure range. No company is lying in 270-280 percent and 280-290 percent capital structure ranges during this year also. It has been observed that largest number of companies is in 0-100 percent capital structure range during 1995-96 (minimum = 19.61 percent, maximum = 100 percent, industry average = 55.72 percent) and 2005-06 (minimum = 20 percent, maximum = 94.12 percent, industry average = 62.68 percent). With the rise in debt service ratio ranges, the number of companies is shifting to this broader capital structure range and reaches to 100 percent in three ranges of debt service ratio during 1995-96 and 94.12 percent in more than 1000 percent debt service ratio range during 2005-06, respectively. However, fluctuating trend has been observed in 100-200 percent capital structure range during the study period. The lowest number of companies is in 200-300 percent and more than 300 percent capital structure ranges during 1995-96 (4.06 percent each) and 2005-06 (7.39 percent and 3.52 percent), respectively. With the rise in debt service ratio ranges, the number of companies is declining in 200-300 percent and more than 300 percent capital structure ranges during the study period. In nutshell, it has been observed that with the rise in debt service ratio ranges, the number of companies is moving from higher capital structure ranges towards lower capital structure ranges under the four broader categories of capital structure ranges during the period under study. Overall, rise in debt service ratio results in the shrinkage of number of capital structure ranges as well as decline in the distribution of companies to the higher capital structure ranges during the period under study. Hence, it emerges that at lower debt service ratio, there exists higher capital structure ranges and vice-versa, which represents negative relationship between capital structure and debt service ratio during the study period. Higher debt service ratio means higher earnings and /or higher internal resources which imply that higher earnings and/or higher internal resources are creating less dependency of companies upon debt capital. That is why the companies are using lesser amount of debt for financing purposes.

3.3 CURRENT RATIO

It is evident from Table 5 & 6 in Annexure that three fourth of the companies are in two ranges of current ratio of 1-1.50 times and 1.50-2 times during 1995-96 (75.72 percent) and more than three fifth of the companies are in the same ranges of current ratio during 2005-06 (62.72 percent), respectively. Current ratio wise, the highest number of companies is in 1-1.50 times current ratio range during 1995-96 (51.79 percent) and 2005-06 (35.19 percent), respectively. The lowest number of companies is in 0-.50 times current ratio range during 1995-96 (.71 percent) and 2005-06 (.35 percent), respectively. Under 1-1.50 times current ratio range, where highest number of companies is lying, it has been observed that 56.57 percent and 75.24 percent companies are in only eight and twelve out of thirty one capital structure ranges during 1995-96 and 2005-06, respectively. It has been observed that, in 1995-96, when the current ratio is considered in relation to capital structure ranges as liquidity, initially the spread of number of companies starts expanding over the entire capital structure ranges in .50-1 and 1-1.50 ranges of current ratio. Thereafter, this spread contracts from higher capital structure ranges to lower capital structure ranges with the rise in current ratio of companies. Similar trends have also been observed in 2005-06 with a few exceptions here and there. Capital structure range wise, it has been observed that the highest number of companies (8.21 percent) is in 100-110 percent capital structure range, followed by 7.50 percent companies in 60-70 percent capital structure range, while no company is lying in 260-270 percent, 280-290 percent and 290-300 percent capital structure ranges during 1995-96. However, during 2005-06, the highest number of companies (19.51 percent) is in 0-10 percent capital structure range, followed by 6.27 percent companies in 110-120 percent capital structure range. No company is lying in 270-280 percent and 280-290 percent capital structure ranges in this year also. It has been observed that largest number of companies is in 0-100 percent capital structure range during 1995-96 (minimum = 40 percent, maximum = 100 percent, industry average = 55 percent) and 2005-06 (minimum = 35.48 percent, maximum = 100 percent, industry average = 63.07 percent). With the rise in current ratio ranges, the number of companies is shifting to this broader capital structure range and reaches to 100 percent in more than 4 current ratio range during 1995-96, and 88.24 percent in 2-2.50 current ratio range during 2005-06, respectively. However, in 100-200 percent capital structure range, the number of companies reaches to nil in the last two ranges of current ratio during 1995-96. However, declining trend continues during 2005-06. The lowest number of companies is in 200-300 percent and more than 300 percent capital structure ranges during 1995-96 (3.93 percent each) and 2005-06 (7.32 percent and 3.48 percent), respectively. With the rise in current ratio ranges, the number of companies is jumbling in these two broader capital structure ranges and reaches to nil in nearly half ranges of

current ratio during 1995-96 and 2005-06, respectively. In nutshell, it has been observed that with the rise in current ratio ranges, the number of companies is moving from higher capital structure ranges towards lower capital structure ranges under the four broader categories of capital structure ranges during the period under study. Overall, rise in current ratio results in the shrinkage of number of capital structure ranges during the period under study. So, it emerges that at lower current ratio, there exists higher capital structure ranges and vice-versa, which represents negative relationship between capital structure and current ratio ranges during the study period. It shows that higher liquidity implying less dependency of companies upon debt capital. That is why the companies are using lesser amount of debt for financing purposes during the period under study. With the rise in current ratio ranges, the number of companies is jumbling in these two broader capital structure ranges and reaches to nil in nearly half ranges of current ratio during 1995-96 and 2005-06, respectively. In nutshell, it has been observed that with the rise in current ratio ranges, the number of companies is moving from higher capital structure ranges towards lower capital structure ranges under the four broader categories of capital structure ranges during the period under study. Overall, rise in current ratio results in the shrinkage of number of capital structure ranges during the period under study. So, it emerges that at lower current ratio, there exists higher capital structure ranges and vice-versa, which represents negative relationship between capital structure and current ratio ranges during the study period. It shows that higher liquidity implying less dependency of companies upon debt capital. That is why the companies are using lesser amount of debt for financing purposes during the period under study.

4. SUMMARY AND CONCLUSIONS

This paper examines the capital structure decisions of developing countries through a case study of Indian corporate sector by classifying the capital structure of sample companies by cash flow coverage ratio, debt service ratio and current ratio. The present study, although an exploratory effort, is limited to 298 out of top 500 private sector manufacturing firms selected on the basis of sales turnover for the year 2004-2005, published in Business Today, which covers a time span of eleven years commencing from 1995-96 to 2005-06. The following are the conclusion and findings of capital structure decisions of Indian corporate sector.

1. It is observed that, capital structure range wise, the highest number of companies, for all the variables under study, is in 100-110 percent capital structure range during the year 1995-96 (7.78-8.21 percent) and in 0-10 percent capital structure range during the year 2005-06 (18.66-19.58 percent), respectively.
2. It is observed that larger number of companies is distributed, for all the variables under study, in 0-100 percent capital structure range during 1995-96 (55 to

- 55.93 percent) and 2005-06 (62.68 to 63.29 percent), respectively.
3. It is found that lesser number of companies is distributed, for all the variables under study, in 200-300 percent and more than 300 percent capital structure ranges during 1995-96 (3.93 to 4.06 percent each) and 2005-06 (7.32 to 7.39 percent and 3.48 to 3.52 percent), respectively.
 4. The number of companies is higher in 0-100 percent and 200-300 percent capital structure ranges during the year 2005-06 as compared to the number of companies in the same ranges during the year 1995-96 for all the variables under study.
 5. The number of companies is lower in 100-200 percent and more than 300 percent capital structure ranges during the year 2005-06 as compared to the number of companies in the same ranges during the year 1995-96 for all the variables under study.
 6. Around 92 percent and 8 percent companies are lying in 0-200 percent and more than 200 percent capital structure ranges during 1995-96 while around 89 percent and 11 percent companies are also lying in same capital structure ranges for all the variables under study during 2005-06, respectively.

Overall, during the study period, there is a shifting of companies from higher capital structure ranges towards lower capital structure ranges. Cash flow coverage ratio, debt-service ratio and current ratio are showing negative relationship with capital structure, implying less use of debt when these variables attain a higher value during 1995-96 and 2005-06, respectively.

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ANNEXURE

Table 1-Capital Str. of Sample Companies by Cash Flow Coverage Ratio in 1995-96									
Capital	Cash Flow Coverage Ratio (%)								
Str. (%)	0-5	5-10	10-15	15-20	20-25	25-30	30-35	> 35	Average
00-10	0	3.85	3.90	1.30	0	5.56	20	42.86	4.07
10-20	16.67	3.85	1.30	2.60	0	11.11	20	42.86	4.81
20-30	8.33	11.54	1.30	3.90	4.65	0	0	14.29	4.07
30-40	0	0	7.79	5.19	6.98	22.22	10	0	6.67
40-50	0	0	3.90	3.90	4.65	11.11	0	0	3.70
50-60	0	3.85	5.19	3.90	13.95	5.56	10	0	5.93
60-70	8.33	15.38	6.49	5.19	11.63	0	10	0	7.41
70-80	8.33	7.69	3.90	5.19	11.63	11.11	20	0	7.04
80-90	8.33	7.69	5.19	3.90	11.63	5.56	0	0	5.93
90-100	0	7.69	5.19	10.39	6.98	0	0	0	6.30
100-110	0	7.69	10.39	12.99	2.33	0	0	0	7.78
110-120	8.33	3.85	2.60	6.49	4.65	11.11	0	0	4.81
120-130	0	0	6.49	5.19	6.98	0	0	0	4.44
130-140	8.33	7.69	5.19	5.19	0	11.11	0	0	4.81
140-150	0	0	9.09	2.60	6.98	5.56	0	0	4.81
150-160	0	0	2.60	2.60	2.33	0	0	0	1.85
160-170	0	0	2.60	3.90	2.33	0	0	0	2.22
170-180	0	0	5.19	1.30	0	0	0	0	1.85
180-190	0	3.85	2.60	1.30	0	0	0	0	1.48
190-200	8.33	3.85	1.30	2.60	0	0	0	0	1.85
200-210	0	0	0	1.30	0	0	0	0	0.37
210-220	8.33	0	0	1.30	0	0	0	0	0.74
220-230	0	0	0	2.60	0	0	10	0	1.11
230-240	0	0	1.30	0	0	0	0	0	0.37
240-250	0	0	1.30	0	0	0	0	0	0.37
250-260	0	0	1.30	0	0	0	0	0	0.37
260-270	0	0	0	0	0	0	0	0	0
270-280	0	0	1.30	1.30	0	0	0	0	0.74
280-290	0	0	0	0	0	0	0	0	0
290-300	0	0	0	0	0	0	0	0	0
>300	16.67	11.54	2.60	3.90	2.33	0	0	0	4.07

Total %age	100	100	100	100	100	100	100	100	100
Average	4.44	9.63	28.52	28.52	15.93	6.67	3.70	2.59	100
0-100	50	61.54	44.16	45.45	72.09	72.22	90	100	55.93
100-200	25	26.92	48.05	44.16	25.58	27.78	0	0	35.93
200-300	8.33	0	5.19	6.49	0	0	10	0	4.07
>300	16.67	11.54	2.60	3.90	2.33	0	0	0	4.07

Table 2–Capital Str. of Sample Companies by Cash Flow Coverage Ratio in 2005-06

Capital Str. (%)	Cash Flow Coverage Ratio (%)								Average
	0-5	5-10	10-15	15-20	20-25	25-30	30-35	> 35	
00-10	0	7.5	4.88	16	42.42	45.83	72.73	40	19.58
10-20	36.36	0	1.22	4	6.06	8.33	0	10	4.55
20-30	9.09	2.5	1.22	6.67	12.12	0	9.09	10	4.90
30-40	0	0	2.44	5.33	6.06	16.67	18.18	30	5.94
40-50	0	10	4.88	6.67	9.09	0	0	10	5.94
50-60	0	2.5	6.10	8	0	12.5	0	0	5.24
60-70	0	5	3.66	6.67	3.03	8.33	0	0	4.55
70-80	0	2.5	9.76	2.67	6.06	4.17	0	0	4.90
80-90	9.09	2.5	6.10	4	9.09	4.17	0	0	4.90
90-100	0	5	7.32	0	0	0	0	0	2.80
100-110	0	5	2.44	5.33	0	0	0	0	2.80
110-120	0	5	8.54	10.67	3.03	0	0	0	6.29
120-130	0	0	2.44	4	0	0	0	0	1.75
130-140	0	7.5	4.88	5.33	0	0	0	0	3.85
140-150	0	2.5	4.88	6.67	0	0	0	0	3.50
150-160	0	7.5	3.66	1.33	3.03	0	0	0	2.80
160-170	0	2.5	0	0	0	0	0	0	0.35
170-180	9.09	5	3.66	2.67	0	0	0	0	2.80
180-190	0	0	1.22	0	0	0	0	0	0.35
190-200	0	2.5	3.66	0	0	0	0	0	1.40
200-210	0	5	0	0	0	0	0	0	0.70
210-220	9.09	0	1.22	0	0	0	0	0	0.70
220-230	0	5	2.44	0	0	0	0	0	1.40
230-240	0	0	2.44	0	0	0	0	0	0.70
240-250	9.09	2.5	1.22	0	0	0	0	0	1.05
250-260	0	2.5	3.66	1.33	0	0	0	0	1.75
260-270	0	0	1.22	0	0	0	0	0	0.35
270-280	0	0	0	0	0	0	0	0	0
280-290	0	0	0	0	0	0	0	0	0
290-300	9.09	2.5	0	0	0	0	0	0	0.70
>300	9.09	7.5	4.88	2.67	0	0	0	0	3.50
Total %age	100	100	100	100	100	100	100	100	100
Average	3.85	13.99	28.67	26.22	11.54	8.39	3.85	3.50	100
0-100	54.55	37.50	47.56	60	93.94	100	100	100	63.29

100-200	9.09	37.50	35.37	36	6.06	0	0	0	25.87
200-300	27.27	17.50	12.20	1.33	0	0	0	0	7.34
>300	9.09	7.50	4.88	2.67	0	0	0	0	3.50

Table 3 - Capital Structure of Sample Companies by Debt Service Ratio in 1995-96

Capital Str. %	Debt Service Ratio (%)											Avg.
	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	800-900	900-1000	>1000	
00-10	0	0	0	0	0	0	0	0	0	33.33	31.25	4.06
10-20	11.11	0	1.45	0	0	0	0	9.09	12.5	33.33	25	4.80
20-30	11.11	0	0	2.33	5	12.5	0	9.09	12.5	0	12.5	4.06
30-40	0	1.96	1.45	4.65	15	6.25	0	9.09	25	33.33	18.75	6.64
40-50	0	1.96	1.45	4.65	0	12.5	11.11	18.18	0	0	3.13	3.69
50-60	0	1.96	2.90	4.65	15	6.25	33.33	18.18	12.5	0	3.13	5.90
60-70	11.11	1.96	7.25	6.98	10	25	22.22	9.09	12.5	0	0	7.38
70-80	0	3.92	1.45	11.63	20	18.75	22.22	9.09	12.5	0	0	7.01
80-90	0	5.88	4.35	13.95	0	18.75	0	0	0	0	3.13	5.90
90-100	0	1.96	10.14	9.30	15	0	0	18.18	0	0	0	6.27
100-110	0	7.84	20.29	6.98	5	0	0	0	0	0	0	8.12
110-120	0	5.88	10.14	4.65	5	0	0	0	0	0	0	4.80
120-130	0	1.96	8.70	11.63	0	0	0	0	0	0	0	4.43
130-140	11.11	7.84	5.80	4.65	5	0	0	0	12.5	0	0	4.80
140-150	0	11.76	4.35	4.65	5	0	11.11	0	0	0	0	4.80
150-160	0	5.88	1.45	2.33	0	0	0	0	0	0	0	1.85
160-170	0	5.88	2.90	2.33	0	0	0	0	0	0	0	2.21
170-180	0	3.92	4.35	0	0	0	0	0	0	0	0	1.85
180-190	0	3.92	2.90	0	0	0	0	0	0	0	0	1.48
190-200	11.11	5.88	1.45	0	0	0	0	0	0	0	0	1.85
200-210	0	0	0	2.33	0	0	0	0	0	0	0	0.37
210-220	11.11	1.96	0	0	0	0	0	0	0	0	0	0.74
220-230	0	1.96	1.45	0	0	0	0	0	0	0	3.13	1.11
230-240	0	1.96	0	0	0	0	0	0	0	0	0	0.37
240-250	0	1.96	0	0	0	0	0	0	0	0	0	0.37
250-260	0	1.96	0	0	0	0	0	0	0	0	0	0.37
260-270	0	0	0	0	0	0	0	0	0	0	0	0
270-280	0	0	2.90	0	0	0	0	0	0	0	0	0.74
280-290	0	0	0	0	0	0	0	0	0	0	0	0
290-300	0	0	0	0	0	0	0	0	0	0	0	0
>300	33.33	9.80	2.90	2.33	0	0	0	0	0	0	0	4.06
Total%	100	100	100	100	100	100	100	100	100	100	100	100
Average	3.32	18.82	25.46	15.87	7.38	5.90	3.32	4.06	2.95	1.11	11.81	100
0-100	33.33	19.61	30.43	58.14	80	100	88.89	100	87.50	100	96.88	55.72
100-200	22.22	60.78	62.32	37.21	20	0	11.11	0	12.50	0	0	36.16
200-300	11.11	9.80	4.35	2.33	0	0	0	0	0	0	3.13	4.06
>300	33.33	9.80	2.90	2.33	0	0	0	0	0	0	0	4.06

Table 4 - Capital Structure of Sample Companies by Debt Service Ratio in 2005-06

Capital Str. %	Debt Service Ratio (%)											Avg.
	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	800-900	900-1000	>1000	
00-10	0	0	0	0	3.70	0	0	0	0	0	43.70	18.66
10-20	9.09	6.67	5.88	3.23	0	0	0	0	0	0	7.56	4.58
20-30	9.09	0	0	0	0	4.35	0	0	0	0	10.08	4.93
30-40	0	0	0	0	0	4.35	0	8.33	0	0	12.61	5.99
40-50	0	0	5.88	0	0	0	14.29	25	0	33.33	6.72	5.99
50-60	0	0	0	3.23	7.41	8.70	0	16.67	33.33	11.11	4.20	5.28
60-70	0	0	0	3.23	3.70	13.04	7.14	8.33	16.67	11.11	3.36	4.58
70-80	0	0	5.88	9.68	7.41	8.70	7.14	8.33	16.67	11.11	1.68	4.93
80-90	9.09	13.33	0	6.45	3.70	0	7.14	8.33	0	11.11	4.20	4.93
90-100	9.09	0	5.88	3.23	7.41	8.70	7.14	0	0	0	0	2.82
100-110	0	0	5.88	3.23	3.70	8.70	14.29	0	0	11.11	0.84	3.17
110-120	0	20	5.88	12.90	11.11	8.70	14.29	8.33	0	0	1.68	6.34
120-130	0	0	0	6.45	7.41	0	0	0	0	0	0.84	1.76
130-140	0	6.67	23.53	6.45	7.41	4.35	0	8.33	0	0	0	3.87
140-150	0	6.67	0	6.45	3.70	8.70	7.14	8.33	33.33	0	0	3.52
150-160	0	6.67	0	9.68	11.11	0	7.14	0	0	0	0	2.82
160-170	0	6.67	0	0	0	0	0	0	0	0	0	0.35
170-180	9.09	6.67	0	0	11.11	13.04	0	0	0	0	0	2.82
180-190	0	0	0	3.23	0	0	0	0	0	0	0	0.35
190-200	0	0	5.88	3.23	3.70	4.35	0	0	0	0	0	1.41
200-210	0	6.67	0	0	3.70	0	0	0	0	0	0	0.70
210-220	9.09	0	0	0	0	0	7.14	0	0	0	0	0.70
220-230	0	6.67	5.88	0	3.70	0	7.14	0	0	0	0	1.41
230-240	0	0	0	3.23	0	0	0	0	0	11.11	0	0.70
240-250	9.09	6.67	5.88	0	0	0	0	0	0	0	0	1.06
250-260	0	0	11.76	6.45	0	0	0	0	0	0	0.84	1.76
260-270	0	0	0	3.23	0	0	0	0	0	0	0	0.35
270-280	0	0	0	0	0	0	0	0	0	0	0	0
280-290	0	0	0	0	0	0	0	0	0	0	0	0
290-300	9.09	0	5.88	0	0	0	0	0	0	0	0	0.70
>300	27.27	6.67	5.88	6.45	0	4.35	0	0	0	0	1.68	3.52
Total%	100	100	100	100	100	100	100	100	100	100	100	100
Average	3.87	5.28	5.99	10.92	9.51	8.10	4.93	4.23	2.11	3.17	41.90	100
0-100	36.36	20	23.53	29.03	33.33	47.83	42.86	75	66.67	77.78	94.12	62.68
100-200	9.09	53.33	41.18	51.61	59.26	47.83	42.86	25	33.33	11.11	3.36	26.41
200-300	27.27	20	29.41	12.90	7.41	0	14.29	0	0	11.11	0.84	7.39
>300	27.27	6.67	5.88	6.45	0	4.35	0	0	0	0	1.68	3.52

Table 5 – Capital Structure of Sample Companies by Current Ratio in 1995-96

Capital	Current Ratio (Times)										
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Str. (%)	0-.50	.50-1	1-1.50	1.50-2	2-2.50	2.50-3	3-3.50	3.50-4	> 4	Avg.
00-10	0	0	2.76	0	7.69	0	20	60	33.33	3.93
20-Oct	0	0	3.45	1.49	15.38	11.11	0	0	66.67	4.64
20-30	0	5.56	4.14	2.99	7.69	0	0	0	0	3.93
30-40	0	16.67	4.14	7.46	7.69	11.11	20	0	0	6.43
40-50	0	5.56	2.76	4.48	7.69	11.11	0	0	0	3.93
50-60	0	5.56	5.52	7.46	7.69	0	0	0	0	5.71
60-70	0	5.56	6.21	8.96	7.69	22.22	0	20	0	7.5
70-80	50	5.56	6.9	7.46	3.85	22.22	0	0	0	7.14
80-90	0	11.11	5.52	4.48	11.54	0	0	0	0	5.71
90-100	0	5.56	6.9	8.96	0	0	0	0	0	6.07
100-110	0	0	11.72	8.96	0	0	0	0	0	8.21
110-120	0	0	2.76	8.96	3.85	11.11	40	0	0	5
120-130	0	0	4.14	10.45	0	0	0	0	0	4.64
130-140	0	0	5.52	5.97	3.85	0	0	0	0	4.64
140-150	0	0	8.28	2.99	0	0	0	0	0	5
150-160	0	0	2.07	0	3.85	11.11	0	0	0	1.79
160-170	0	0	3.45	2.99	0	0	0	0	0	2.5
170-180	0	0	0.69	4.48	3.85	0	0	0	0	1.79
180-190	0	0	1.38	0	7.69	0	0	0	0	1.43
190-200	0	11.11	2.76	0	0	0	0	0	0	2.14
200-210	0	0	0.69	0	0	0	0	0	0	0.36
210-220	0	0	1.38	0	0	0	0	0	0	0.71
220-230	0	0	1.38	0	0	0	20	0	0	1.07
230-240	0	5.56	0	0	0	0	0	0	0	0.36
240-250	0	0	0.69	0	0	0	0	0	0	0.36
250-260	0	0	0.69	0	0	0	0	0	0	0.36
260-270	0	0	0	0	0	0	0	0	0	0
270-280	0	0	1.38	0	0	0	0	0	0	0.71
280-290	0	0	0	0	0	0	0	0	0	0
290-300	0	0	0	0	0	0	0	0	0	0
>300	50	22.22	2.76	1.49	0	0	0	20	0	3.93
Total %	100	100	100	100	100	100	100	100	100	100
Average	0.71	6.43	51.79	23.93	9.29	3.21	1.79	1.79	1.07	100
0-100	50	61.11	48.28	53.73	76.92	77.78	40	80	100	55
100-200	0	11.11	42.76	44.78	23.08	22.22	40	0	0	37.14
200-300	0	5.56	6.21	0	0	0	20	0	0	3.93
>300	50	22.22	2.76	1.49	0	0	0	20	0	3.93

Table 6 – Capital Structure of Sample Companies by Current Ratio in 2005-06

Capital	Current Ratio (Times)									Avg.
	0-.50	.50-1	1-1.50	1.50-2	2-2.50	2.50-3	3-3.50	3.50-4	> 4	
Str. (%)										
00-10	0	9.68	12.87	20.25	29.41	31.25	71.43	33.33	20	19.51
20-Oct	100	3.23	1.98	5.06	2.94	6.25	0	0	20	4.53
20-30	0	3.23	3.96	2.53	11.76	12.5	0	0	6.67	4.88
30-40	0	3.23	4.95	8.86	5.88	0	14.29	33.33	0	5.92
40-50	0	3.23	6.93	6.33	8.82	6.25	0	0	0	5.92
50-60	0	0	4.95	6.33	8.82	12.5	0	0	0	5.23
60-70	0	0	6.93	5.06	5.88	0	0	0	0	4.53
70-80	0	3.23	2.97	6.33	11.76	6.25	0	0	0	4.88
80-90	0	3.23	4.95	7.59	2.94	0	0	0	6.67	4.88
90-100	0	6.45	4.95	1.27	0	0	0	0	0	2.79
100-110	0	6.45	4.95	2.53	0	0	0	0	0	3.14
110-120	0	9.68	4.95	6.33	5.88	0	0	0	20	6.27
120-130	0	3.23	1.98	1.27	0	0	0	0	6.67	1.74
130-140	0	3.23	7.92	1.27	0	6.25	0	0	0	3.83
140-150	0	6.45	1.98	5.06	0	6.25	0	33.33	0	3.48
150-160	0	6.45	4.95	1.27	0	0	0	0	0	2.79
160-170	0	3.23	0	0	0	0	0	0	0	0.35
170-180	0	3.23	5.94	0	2.94	0	0	0	0	2.79
180-190	0	0	0.99	0	0	0	0	0	0	0.35
190-200	0	0	2.97	1.27	0	0	0	0	0	1.39
200-210	0	0	0	1.27	0	0	0	0	6.67	0.7
210-220	0	3.23	0	0	0	0	0	0	6.67	0.7
220-230	0	3.23	0.99	2.53	0	0	0	0	0	1.39
230-240	0	0	0.99	0	0	6.25	0	0	0	0.7
240-250	0	3.23	0.99	0	0	6.25	0	0	0	1.05
250-260	0	0	1.98	2.53	0	0	0	0	6.67	1.74
260-270	0	0	0.99	0	0	0	0	0	0	0.35
270-280	0	0	0	0	0	0	0	0	0	0
280-290	0	0	0	0	0	0	0	0	0	0
290-300	0	0	0	2.53	0	0	0	0	0	0.7
>300	0	12.9	1.98	2.53	2.94	0	14.29	0	0	3.48
Total %	100	100	100	100	100	100	100	100	100	100
Average	0.35	10.8	35.19	27.53	11.85	5.57	2.44	1.05	5.23	100
0-100	100	35.48	55.45	69.62	88.24	75	85.71	66.67	53.33	63.07
100-200	0	41.94	36.63	18.99	8.82	12.5	0	33.33	26.67	26.13
200-300	0	9.68	5.94	8.86	0	12.5	0	0	20	7.32
>300	0	12.9	1.98	2.53	2.94	0	14.29	0	0	3.48

Table 7--%age Distribution of Sample Companies during 1995-96 to 2005-06 (Year wise)

Capital	Years											Avg.
	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	
00-10	4	4	8.60	10.10	11.00	11.72	14.58	18.62	17.59	19.18	19.51	12.72
10-20	4.73	5.09	5.38	3.83	5.15	3.79	4.51	2.76	6.90	6.16	4.53	4.80
20-30	4	6.18	2.15	4.53	3.44	5.17	6.60	6.90	4.48	5.82	4.88	4.93
30-40	6.55	5.09	4.66	3.48	4.12	4.48	3.82	5.17	5.52	4.45	5.92	4.83
40-50	4	5.09	5.73	4.18	6.53	5.17	4.51	3.45	4.48	5.14	5.92	4.93
50-60	5.82	5.45	4.66	4.18	5.84	6.90	6.25	4.14	4.14	3.77	5.23	5.12
60-70	7.27	4	4.30	5.57	5.84	5.17	5.21	6.21	6.21	5.82	4.53	5.47
70-80	7.27	5.82	5.38	5.23	3.78	5.17	4.86	4.48	5.52	5.82	4.88	5.28
80-90	5.82	5.82	5.38	5.23	6.53	7.24	2.43	4.48	4.48	3.42	4.88	5.06
90-100	6.18	6.18	4.66	5.92	4.12	3.45	5.56	1.03	4.14	4.11	2.79	4.36
100-110	8	6.18	3.94	3.48	5.50	4.14	3.82	2.76	3.10	5.48	3.14	4.48
110-120	5.09	9.09	4.66	4.18	1.03	2.76	2.78	4.48	4.48	2.40	6.27	4.26
120-130	4.36	4.73	4.30	3.14	4.81	2.41	3.47	4.48	2.41	2.05	1.74	3.44
130-140	4.73	3.64	4.66	3.83	3.44	2.76	3.47	2.76	3.10	0.68	3.83	3.34
140-150	4.73	3.27	2.87	3.14	2.06	4.83	1.39	2.76	3.10	2.74	3.48	3.12
150-160	1.82	3.27	4.66	3.48	1.37	1.72	2.78	2.41	1.03	4.11	2.79	2.67
160-170	2.55	3.64	1.79	3.83	3.44	1.38	1.74	0.69	1.38	3.42	0.35	2.19
170-180	1.82	1.82	4.66	2.09	2.06	2.41	1.04	2.41	1.72	1.37	2.79	2.19
180-190	1.45	1.82	2.15	1.74	2.41	2.07	2.08	0.69	1.03	2.74	0.35	1.69
190-200	1.82	2.18	2.51	1.39	1.72	2.41	0.69	0.69	0.69	1.03	1.39	1.49
200-210	0.36	0.36	1.08	2.44	1.72	1.38	2.78	2.07	2.07	1.37	0.70	1.49
210-220	0.73	1.45	1.79	1.74	1.37	1.03	1.04	1.72	2.41	0.68	0.70	1.34
220-230	1.09	0.73	1.79	1.74	0	1.38	1.04	1.38	1.03	1.03	1.39	1.15
230-240	0.36	0	0.72	0.70	1.03	1.03	1.74	1.38	1.72	0.68	0.70	0.92
240-250	0.36	0	1.08	1.05	1.03	0	0.35	0.69	0.69	1.03	1.05	0.67
250-260	0.36	0.36	0.72	1.74	1.03	1.03	0	1.38	0.34	0.34	1.74	0.83
260-270	0	0	0	0.35	0.34	0	1.04	0.34	0.69	0.34	0.35	0.32
270-280	0.73	0.36	0.72	0.35	0.34	0.34	1.04	0.34	0.34	0.34	0	0.45
280-290	0	0	0.36	0	0.34	0.69	1.04	1.38	0	0.34	0	0.38
290-300	0	0	0.36	0	1.03	0.34	0.35	0.34	0.69	0	0.70	0.35
>300	4	4.36	4.30	7.32	7.56	7.59	7.99	7.59	4.48	4.11	3.48	5.73
Total %	100	100	100	100	100	100	100	100	100	100	100	100
0-100	55.64	52.73	50.90	52.26	56.36	58.28	58.33	57.24	63.45	63.70	63.07	57.51
100-200	36.36	39.64	36.20	30.31	27.84	26.90	23.26	24.14	22.07	26.03	26.13	28.88
200-300	4	3.27	8.60	10.10	8.25	7.24	10.42	11.03	10	6.16	7.32	7.89
>300	4	4.36	4.30	7.32	7.56	7.59	7.99	7.59	4.48	4.11	3.48	5.73