CHAPTER 4

CHANGES IN CAPITAL STRUCTURE

The data required for the purpose of this thesis was collected mainly from the audited balance sheet and the published financial information.Wherever found necessary the information was collected directly from the company officials. For the purpose of this thesis the information & data was collected from the year 1989 to 1996.The information was classified in the following categories in order to arrive at conclusions :

1. The capital structure of the company and changes taking place in it over the above period
2. The profitability of the company and the changes taking place in it over the above period
3. Computation of Financial & Operating leverage
4. Computation of financial ratios
5. The Earnings per share and changes therein

This chapter is devoted to analyse changes in capital structure and various ratios based on it.

4 . 1 . CHANGES IN CAPITAL STRUCTURE :

During the period of seven years beginning from 1989 to 1996 the capital structure of the company underwent substantial change both in terms of owned funds and borrowed firms.The changes occurred both in the nature of funds and their respective proportion in the capital structure.This was necessitated by the growing business needs.As the company started growing in accordance with the growth in demand for the products of the company the requirements of funds also increased.With the growth in owned funds and profitability the capacity of the company to raise funds also increased.

4. 1 (i) Changes in Share Capital :

The authorised share capital of the company consisted of 10,00,000 Equity shares of Rs.10 each paid up in 1989.The authorised share capital was enhanced in 1995 to 50,00,000 Equity shares of Rs.10 each paid up and again the authorised capital was enhanced in 1996 to 80,00,000 equity shares of Rs.10 each paid up.Thus during the period 1989-1996 the authorised share capital has increased by 8 times to Rs.8,00,00,000 from Rs.1,00,00,000.The increase in the authorised share capital in rupee terms is as under :

	Rs.
31.03.1989	1,00,00,000
31.03.1995	5,00,00,000
31.03.1996	8,00,00,000

Even though increase in authorised share capital does not represent actual inflow of money in the company the very fact that the company increased its authorised share capital shows that the company was contemplating future expansion plans necessitating such scale of share capital.Another significant point regarding the share capital is that it does not consist of Preference shares.The preference shares are entitled to a fixed rate of dividend which may be cumulative or non cumulative.Further the preference shares are entitled to be repaid ahead of the equity shareholders.Similarly the prefernce shares have to be redeemed before the expiry of 10 years from date of their issue.In fact there is a controversy regarding the treatment of preference shares i.e. whether to include them in debt or capital.

As against the increase in the authorised capital the increase in the issued,subscribed and paid up share capital was as under :

	Rs.
31.03.1989	60,00,000
31.03.1995	85,00,000
31.03.1996	1,70,00,000

Thus the paid up capital increased by 283 % as on 31.03.1996 as compared with the figure of capital as on

31.03.1989.Another noteworthy feature of increase in the paid up share capital as on 31.03.1996 was that the share capital doubled to Rs.1,70,00,000 by issue of bonus shares in the ratio of 1:1.In keeping with the guidelines for Issue of Bonus Shares the bonus shares were issued out of the Share Premium Account.The company made a private placement in 1995 of 250000 equity shares of Rs.10 each paid up at a premium of Rs.173.40 per share.This resulted in total share premium amount collected by the company amounting to Rs.4,33,50,000.This share premium amount collected in 1995 was utilised for issue of bonus shares in 1996.

4. 1 (ii) Increase in Reserves & Surplus :

Increase in Reserves & Surplus represent increase in Revenue or Capital Reserves and Profit & Loss Account balance respectively.As on 31.03.1989 the company possessed meagre reserves.The total amount of reserves as on 31.03.1989 was Rs.20026.The break up was as under :

	Rs.
Capital Reserve (Created by way of Profit on reissue of forfeited shares)	14926
Share Premium	5100
	20026

All the above reserves are called as Capital Reserves since they are not created out of profits generated in the business. They are basically created on account of receipts on capital account. As regards the reserves created out of business profits the company had a negative position as on 31.03.1989. The accumulated loss as on 31.03.1989 of the company amounted to Rs.94,61,468. The total loss of the company as on 31.03.1987 amounted to Rs.1,14,37,628 which came down to Rs.94,61,468 on account of profits earned by the company during 1988 & 1989. As compared to the total owned funds amounting to Rs.60,20,026 as on 31.03.1989 the company had accumulated losses of Rs.94,61,468 and as on 31.03.1987 Rs.1,14,37,628. The main reasons contributing to this state of affairs were the slow growth in sales & increasing expenses.

Thus as on 31.03.1989 the financial position of the company was not satisfactory and the company had to concentrate on improving its position on all fronts the predominant being the profitability. The company wiped out its accumulated losses in the year ending on 31.03.1991 & as on 31.03.1996 the total reserves position of the company is as follows :

	Rs.
Capital Reserve (Profit on reissue of shares)	14926

Share Premium	3,26,67,100
General Reserve	2.89,36,456
(Created out of Profits)	
Profit & Loss Account	78,04,813
TOTAL	6,94,23,295

Thus as on 31.03.1996 the total revenue reserves i.e.reserves created by the company by setting aside its business profits amounted to Rs.3,67,41,269 as against nil in the year ending on 31.03.1989.

Thus as on 31.03.1996 the total owned funds amounted to Rs.8,64,23,295 as against Rs.60,20,026 as on 31.03.1989.

The following table depicts the yearwise changes taking place in the capital & reserves of the company.

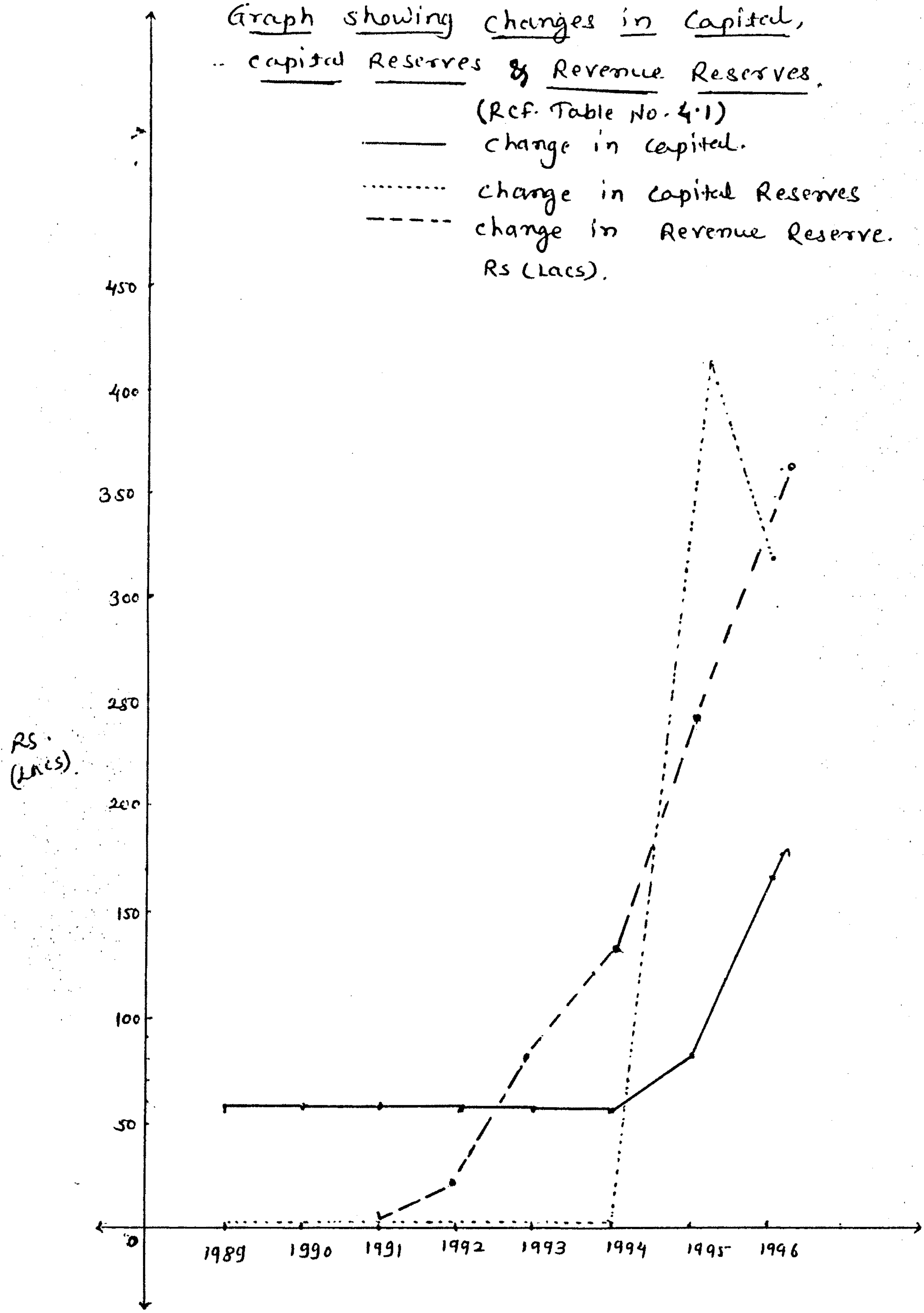
TABLE 4 .1 showing changes in capital & reserves

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
Capital (Rs. in lacs)	60.	60.	60.	60.	60.	60.	85.	170.
Capital Reserves (Rs. in lacs)	.20	.20	.20	.20	.20	.20	411.67	326.67

Graph No. 4·1

Graph showing changes in Capital, capital Reserves & Revenue Reserves.

(Ref. Table No. 4·1)



Revenue Reserves	(94.61)	(55.27)	1.44	22.59	87.04	143.23	252.32	367.40

(Rs. in lacs)

The progress of the company took off since the year 1994.The revenue reserves increased significantly since 1994 alongwith the capital reserves.The profitability of the company also increased since 1994.

Thus the owned funds of the company increased considerably during the eight year period beginning with 1989 & ending with 1996.The increase took place both in the share capital as well as the revenue reserves which were helped by the issue of shares at a premium & good profitability.

4. 1. (iii) CHANGES IN DEBT ;

The total loans of the company both in terms of nature and amount also underwent substantial change during the above period.This reflects the fact that the need for loans was felt to cater to the growing business needs of the company.The debt of the company comprised of both term loans & working capital finance from financial institutions and banks as well unsecured loans from public,associate companies and others.

4. 1. (iii) a. DETAILS OF SECURED LOANS :

The term loans are availed to acquire fixed assets for the expansion project of a company.They are secured by the hypothecation or mortgage of the land & building of the company.The position of secured loans of the company as on

31.03.1989 was as under :

		Rs.
Term Loan From Financial Institution		
SICOM	12.14,692	
MSFC	16,22,220	
		28,36,912
Cash Credit From Banks		79,78,059
TOTAL		1,08,14,971

As against the above loans the total gross block of the company as on 31.03.1989 amounted to Rs.1,22,28,380 and the net block i.e.amount after deducting accumulated depreciation amounted to Rs.54,98,965 while the capital work in progress was Rs.93,183.The total amount of secured loans during the above period yearwise were as under :

TABLE 4 .2 showing details of Secured Loans

Rs. in Lacs

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
Term Loans	28.36	20.30	25.00	30.49	84.30	133.63	195.42	296.13
Cash Credit	79.78	58.00	67.16	90.81	120.68	127.02	129.53	178.83
TOTAL	108.14	78.30	92.16	121.30	204.98	260.65	324.95	474.96

Percentage of term loans to total loans	.26	.26	.27	.25	.41	.51	.60	.62

From the above table it can be seen that as the company began expanding with the help of growing profitability and good market conditions the share of secured loans also progressively increased in the total secured loans.In other words this implies that the company used these funds for the purpose of acquiring fixed assets in furtherence of its expansion programme.This can be verified from the total investment in the fixed assets by the company during the above period :

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
Fixed Assets (Rs. in lacs)	128.37	139.73	159.23	199.72	289.68	364.53	640.67	817.25

The above investment in fixed assets grew by 6.36 times over the above period of eight years whereas the term loans increased by 10.44 times during the same period.This signifies that part of the term loan was utilised for the purposes of working capital in order to strengthen the working capital ratios and liquidity.

In addition to the changes in the total amount of term loans the nature of term loans also underwent significant change during the above period.Earlier the company used to borrow from banks and state financial agencies simple loans.However with the liberalisation of Indian economy many new forms of financing came into practice.In accordance with the trend the company has also raised funds by way of :

a.Term loans from All India Financial Institutions

b.Lease & Hire Purchase

c.Deferred Payment Guarantee Finance

d.Secured Debentures

4. 1 . (iii) b. DETAILS OF UNSECURED LOANS :

The bulk of the unsecured loans was represented by Interest Free Sales Tax Loan from SICOM.The loan was of long term duration for 15 years.The company was established in the backward zone in 1976 and in accordance with the State Govt.Incentive Scheme the company was granted the above loan.The company again availed of new interest free sales tax loan from SICOM in the year 1995 on completion of its fresh expansion.

The break up of unsecured loans was as under :

TABLE 4 . 3 showing details of Unsecured Loans

(Rs. in lacs)

	SICOM LOAN	DEALER DEPOSIT	FIXED DEPOSIT	IDBI LOAN	OTHERS	TOTAL
1989	51.30	4.39	0	0.00	15.09	70.78
1990	54.82	4.63	0	0.00	15.00	74.45

1991	54.82	4.71	0	30.00	15.00	104.53
1992	54.82	6.41	0.66	10.00	15.00	86.89
1993	54.82	0.00	5.31	0.00	7.83	67.96
1994	54.82	0.00	18.00	0.00	9.30	82.12
1995	71.24	0.00	17.67	0.00	50.00	138.91
1996	118.14	0.00	12.80	0.00	66.94	197.89

The above table brings out the following points in regard to the unsecured loans of the company :

i) Major portion of the unsecured loans came from the SICOM interest free sales tax loan which can be availed only by a company which expands its manufacturing business in a notified backward area.This loan jumped from 54.82 lacs in 1990 to 118.14 lacs in 1996.This loan helped the company in maintaining good working capital position as it contributed long term funds to the working capital requirements.Further the fact that the loan was interest free helped the company in reducing the cost of borrowings.This loan is repayable over a period of 15 years and to that extent the company could raise further long term loans.

ii) The company did not raise any fixed deposits from the public under section 58 A of The Companies Act,1956 until the year 1993.Thereafter the company invited new deposits and renewed the existing deposits under the above section.The fixed deposits from public were recognised as low.

4 . 2 . RATIO ANALYSIS :

In addition to what has been stated in the above pages the presentation and analysis of the figures and performance of the company for the above period can be done by calculating some key capital structure ratios and solvency ratios & by calculatng the cost of capital of the company over the period.

4 . 2 . (i) CAPITAL STRUCTURE RATIO :

1.DEBT EQUITY RATIO :

In capital structure ratios Debt Equity Ratio occupies prominent place since long term solvency of a company depends on this ratio.This ratio has been discussed in detail in Chapter 5 point 3 a.

$$\text{DEBT EQUITY RATIO} = \frac{\text{LONG TERM DEBT}}{\text{OWNED FUNDS}}$$

4. 2. (ii) FIXED ASSETS RATIO :

$$\text{FIXED ASSETS RATIO} = \frac{\text{Fixed Assets}}{\text{Owned funds}}$$

This ratio shows the contribution of owned funds to the total investment in fixed assets.This ratio should be around .67 percent which implies that out of Rs.100 of owned funds the investment in fixed assets is Rs.67 leaving the balance for investment in current assets.

TABLE 4 .4 showing calculation of fixed assets ratio

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
ASSETS (Rs. in lacs)	55.91	60.73	72.72	104.80	172.95	226.58	473.34	593.50
OWNED FUNDS (Rs.in lacs)	60.20	60.20	61.45	82.79	147.25	203.44	749.15	864.23
%	.93	1.00	1.18	1.26	1.17	1.11	.63	.69

As stated above the ratio improved only in 1995 & 1996 due to plough back of profits.In the earlier years due to inadequacy of profits the ratio could not be improved or alternatively fresh funds had to be brought in to improve the ratio.

As a natural corollary the current ratio also has to be below the required norm.

TABLE 4 . 5 showing calculation of Current Ratio
(Rs. in Lacs)

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
CURRENT ASSETS	232.00	268.92	269.77	357.91	510.34	680.13	1201.46	1478.65

CURRENT LIABILITIES	146.51	174.87	87.01	172.59	281.19	378.59	479.88	520.98
CASH CREDIT	79.78	57.99	97.16	100.81	120.68	127.02	129.53	243.86
	226.29	232.86	184.17	273.40	401.87	505.61	609.41	764.84
RATIO	1.02	1.15	1.46	1.31	1.27	1.35	1.97	1.93

Thus because of insufficient profits & accumulated losses the current ratio was also not satisfactory in the earlier years.With the profitability increasing in the later years the current ratio also improved & approached the norm of 1.33.

4 . 2 . (iii) TURNOVER RATIO :

Amongst many turnover ratios the most important ratio appropriate for this study is the fixed assets turnover ratio.This ratio shows how many times of fixed assets the turnover is.This ratio is computed as under :

$$\text{FIXED ASSETS TURNOVER} = \frac{\text{TURNOVER}}{\text{FIXED ASSETS}}$$

TABLE 4 . 6 showing Fixed Assets Turnover Ratio

(Rs. in Lacs)

YEAR	1989	1990	1991	1992	1993	1994	1995	1996

SALES	259.95	460.02	569.40	765.87	1099.92	1182.31	1615.29	1988.04
FIXED ASSETS	55.91	60.73	72.72	104.80	172.95	226.58	473.34	593.50
RATIO	4.65	7.57	7.83	7.30	6.36	5.22	3.41	3.35

This ratio shows the efficiency with which the fixed assets of a company are used by the management.A high ratio indicates efficiency in utilisation of assets since it shows that with the same assets the management has sold more. The ratio even declined in 1995 & 1996 from the level of 1989 & 1990.The ratio started declining from 1991 onwards even as the company decided to grow in terms of assets and sales.This explains the slow growth in sales and returns to shareholders and decline in profit margins since 1995 onwards.

4 . 3 . COST OF CAPITAL :

The cost of capital comprises of cost for debt and for shareholders funds.In the case of debt it is the interest rate adjusted for tax deduction available e.g. where term loan is raised @ 18 % the effective cost to the company would be (1 - tax rate) * interest rate i.e. (1 - .40) * 18 which comes to 10.80.

The computation of cost of equity poses some problems.It can not be ascertained exactly what is the cost of obtaining the funds from shareholders.It would in most cases be the expectations of the shareholders of the likely returns on the investment.Further the expectations of returns depend upon the opportunity cost of funds i.e the likely returns on some other investment & the returns prevailing in the market,the returns offered by competitors etc.Further the rate of dividend and the expected capital appreciation also form part of the decision regarding investment in the company by the shareholders.

The cost of capital forms the basis of the theories of capital structure.The theories of capital structure aim to establish relationship between the value of a company & its capital structure e.g.whether value of a company can be increased or decreased by increasing or decreasing the cost of capital through the use of debt capital in the capital structure.The application of the theories of capital structure to the company under study is done below :

TABLE 4 . 7 showing Profits & Capital of the company

(Rs. in lacs)

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
EBIT	33.50	69.88	106.75	125.84	221.66	232.18	266.13	370.36

NP	11.03	39.34	62.52	33.34	79.45	72.39	130.17	148.10
DEBT	178.93	152.75	196.69	208.20	272.90	342.79	463.86	705.19
OWNED FUNDS	60.20	60.20	61.45	82.79	147.25	203.44	749.15	864.23
TOTAL	239.13	212.95	258.14	290.99	420.15	546.23	1213.01	1569.42

CAPITALISATION RATE ASSUMED TO BE 20 % .

4 . 3 . a . NET INCOME APPROACH :

TABLE 4 . 8 showing cost of capital under Net Income Approach

(Rs. in Lacs)

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
EBIT	33.50	69.88	106.75	125.84	221.66	232.18	266.13	370.36
EQUITY	55.15	196.70	312.60	166.70	397.25	361.95	650.85	740.50
DEBT	178.93	152.75	196.69	208.20	272.90	342.79	463.86	705.19
	234.08	349.45	509.29	374.90	670.15	704.74	1114.71	1445.69
ACTUAL CAPITAL	239.13	212.95	258.14	290.99	420.15	546.23	1213.01	1569.42

% OF COST OF CAPITAL	14.31	19.99	20.97	33.57	33.07	32.95	23.87	25.62
% OF COST OF ACTUAL CAPITAL	14.00	32.81	41.35	43.24	52.75	42.51	21.94	23.36

4 . 3. b. NET OPERATING APPROACH :

In this alternative instead of capitalising the NP at the capitalisation rate for arriving at the market value of the equity the EBIT is capitalised at the capitalisation rate & the total value is divided into equity & debt.

TABLE 4 . 9 showing cost of capital under
Net Operating Income Approach

(Rs. in Lacs)

YEAR	1989	1990	1991	1992	1993	1994	1995	1996
EBIT	33.50	69.88	106.75	125.84	221.66	232.18	266.13	370.36
VALUE @ 20 %	167.50	349.40	533.75	629.20	1108.30	1160.90	1330.65	1851.80

ACTUAL CAPITAL	239.13	212.95	258.14	290.99	420.15	546.23	1213.01	1569.42
% COST OF ACTUAL CAPITAL	14.00	32.81	41.35	43.24	52.75	42.51	21.94	23.36

The actual capital of the company was less than the capital at the capitalisation rate except in the last two years under the first alternative.

As a result the cost of capital also decreased in these two years.However in the second alternative the actual capital remained below the capital at the capitalisation level throughout the period except 1989.Therefore the actual cost of capital remained higher than 20 % except 1989.The cost of capital under both the approaches worked out to different figures and as per the actual figures also there was wide diversion.The primary reason being that in actual practice many decisions are taken on the basis of expectations of future earnings & growth the actual outcome of which depends on many uncertain factors.As a result the actual figures of the cost of capital do not necessarily correspond with the figures of the above theories.As stated above the expectations of investors from a company vary according to the progress and size of the company,the perception of the investors regarding its risk and a host of other factors.As a result the actual average figures of cost of capital over a period of time would be more representative.However still it would be very difficult for the management of a company to take decisions on the basis of the average cost of capital figures since the actual market conditions may be adverse or the govt. policies may have undergone a substantial change.e.g. where a company decides to reduce its cost of capital by raising cheap foreign currency loans the rupee may get devalued or where a company proposes to issue shares the market conditions may be unfavourable.Therefore the concept of cost of capital as a tool of management to arrive at minimum cost of capital has had limited application.

4 . 4 . LIMITATIONS OF THEORIES OF COST OF CAPITAL

The limitations of the theories of capital structure can be better understood with the above two calculations of cost of capital & the actual capital & the capital at the capitalisation rate.

i) The corporate income taxes do exist.In fact the profits of the company would have been much higher in the years 1992 & 1993.The benefit of tax deductibility is the most impor tant consideration in financial leverage.

ii) The net operating income method assumes that the value of a company as a whole i.e. the EBIT is capitalised & thereafter the division between debt & equity takes place.Similarly it assumes that where the value of a company changes the composition of debt & equity also changes accordingly.This does not happen in practice since inter-changing in values of debt & equity does not take place.

iii) The investor expectations from a company depend on many factors e.g.risks,industry,earnings etc.It would not be correct to put all companies even falling within the same industry in the same risk class.This is assumed in the Modigliani Miller Thoery.

iv) Another severe limitation relates to the assumption of existence of perfect market conditions.This assumption presumes that there are no restrictions on the transactions of purchase and sell of securities or raising of loans or on interchanging between debt & equity.Similarly it presumes that all concerned persons act on the basis of full & correct information & take decisions rationally.