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# CAPITAL STRUCTURE ANALYSIS WITH REFERENCE TO ANDHRA PRADESH TOURISM DEVELOPMENT CORPORATION AT HIMAYATH NAGAR

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### Abstract

Capital structure, or what is generally known as capital mix, is very important to control the overall cost of capital in order to improve the earnings per share of shareholders. After globalization and liberalization, various financial sector reforms were started by governments, such as reducing rates of interest etc., which directly affected the capital structure planning of firms. Due to this situation, the fertilizer industry also reorganized their capital structure. The financing of a capital structure decision is a significant managerial decision. Initially, the company will have to plan its capital structure at the time of its promotion. Subsequently, whenever funds have to be raised for finance and investment, a capital structure decision is involved. In this research article, the concept of capital structure, capital structure planning and patterns of capital structure in IFFCO and Indo Gulf Corporation Ltd. During the study period, both the companies raised more and more long term funds to meet their development and expansion needs because debt is a cheaper source of finance, especially from 1994-95 onwards when rates of interest decreased regularly in the Indian Capital Market.

Keywords: Capital Mix, Financial Leverage, Managerial Decision, Determinants and Profitability.

### **1. Introduction**

The term capital structure refers to the relationship between the various long term sources of finance such as debentures, preference share capital and equity capital. According to Gesturnberg "capital structure of a company refers to the composition or make-up of its capitalization and it includes all long term resources which are loans, reserves, shares and bonds".

The choice of capital structure essentially concerned with the earnings potential i.e., size and stability of cash flows. Earnings of the company are divided into two broad components a fixed component is earmarked to meet the obligations towards debt capital i.e. interest and a residual component that belongs to equity shareholders. The board of directors (BOD) or chief financial officer of a company should develop an appropriate capital structure, which is most advantageous to the company. The choice of an appropriate capital structure depends on number of factors such as the nature of the company's business regularity, conditions of the money market, attitude of the investor.

The capital structure should be planned generally keeping in view the interest of the equity shareholders and the financial requirements of a company. The equity shareholders, being the owners of the company and the providers of risk bearing capital, (equity) would be always concerned about the ways of financing a company's operation. However, the interest of other groups such as employees, customers, creditors, society and govt. should also be given reasonable consideration. Raising funds through debt is cheaper as compared to raising funds through shares. This is because interest on debt is allowed as an expense for tax purpose dividend is considered to be an appropriation of profits hence payments of dividend does not result in any tax benefit to the company. Thus raising of funds by borrowing is cheaper resulting in higher profits for shareholders.

### 1.1 Need of the Study

- Capital structure planning is very important for a business to survive in the long run as it reduces the firms overall financial risk there by attaining it's long term objectives.
- To do adjustment according to the business environment.
- For the idea generation of new source of fund.

### **1.2 Review of Literature**

• International capital structures converge? By - Joshua S.W. Bahng Source: library.ifmr.ac.in/cgi../opacsearch.pl?. .bahng,%20joshua%20s%20

This study investigates whether international capital structures have converged. In order to analyze the converging trend, this paper has selected the capital structures of major OECD countries during the past 20 years as its database. A graphical pre-ratio indicated converging evidence in the international debt ratios over the years. Motivated by the evidence, this research attempts to confirm the hypothesis of convergence using the econometric models. The empirical ratio showed that the capital structure of Japan has indeed converged towards the global trend. Depending

on the samples taken and the debt ratios define; conflicting results were obtained about the beta and sigma (S.D) convergence hypothesis. Comparing previous studies in capital structures literature, this research support the claim that there was a noticeable difference in debt ratios between bank and market based corporate governance in data period.

# • Trends and Determinants of Corporate Capital Structure In India: A Panel Data Analysis -- L.M.Bhole Jitendra Mahakud Journal: Finance India

This paper presents a brief review of literature review on theories of the capital structure. It also analyses the trends in the corporate capital structure in India in respect of public limited companies (PULCOs) and private limited companies (PRLCOs) and it develops the panel data model for the empirical examination of existing theories of corporate capital structure in the case of private corporate sector in India. The period ratio has also been done to show the impact of liberalization on the determinants of the corporate capital structure in India. It is found that the leverage ratios generally are increased significantly during 1966-2000. Also, apparently dependents on debt are more in the case of public ltd companies than private ltd companies.

### • Control Rights And Capital Structure: An Empirical Investigation Michael R. Roberts and Amir Sufi

The relationship between capital structure and firm value has been the subject of considerable debate, both theoretically and in empirical research. In their seminal article, Modigliani and Miller (1958 and 1963) demonstrate that, in a frictionless world, financial leverage is unrelated to firm value, but in a world with tax-deductible interest payments, firm value and capital structure are positively related. Miller (1977) added personal taxes to the ratio and demonstrated that optimal debt usage occurs on a macro-level, but it does not exist at the firm level. Interest deductibility at the firm level is offset at the investor level.

• Journal of Financial and Strategic Decision Volume 10 Number 1 spring 1997 LONG-RUN STRATEGIC CAPITAL STRUCTURE Dev Prasad\*, Garry D. Bruton\*\* and Andreas G. Merikas\*\*\*

In the increasingly turbulent environment facing business the strategic management of the firm has become more predominate. However to date, the linkage between strategic management and financial management of the firm has largely not been explored. This research utilizes two different methods of ratio to confirm the linkage between capital structure and strategic posture of the firm. Specifically, managers were found to structure the selection of debt and capital intensity in a means consistent with the strategic goal of long-run control of systematic risk.

• The Journal of Online Education, New York, January 2009 Capital Structure and Ownership Structure: Author: BOODHOO Roshan ASc Finance, BBA (Hons) Finance, BSc (Hons) Banking & International Finance Source:www.nyu.edu/classes/keefer/waoe/roshanb3.pdf

There have always been controversies among finance scholars when it comes to the subject of capital structure. So far, researchers have not yet reached a consensus on the optimal capital structure of firms by simultaneously dealing with the agency problem. This paper provides a brief review of literature and evidence on the relationship between capital structure and ownership structure. The paper also provides theoretical support to the factors (determinants) which affects the capital structure.

### 1.3 Objective of the Study

- To study the effect of capital structure on profitability of the firm
- To decide the optimal mix of debt and equity
- To analyze the financial leverage of the firm
- To study the impact of capital structure on the value of the firm
- To analyze the advantages of maintaining the capital structure in the organization

### 1.4 Scope of the Study

A study of capital structure involves examination of long term sources that a company taps in order to meet its requirement's

### **1.5 Data Collection**

All the data collection process has been carried out through the constitutions with the staff members concerned in the department of finance in organization. Direct interactions with the manager, the accountants and related staff concern helped in gathering required data. Took the help of management from other departments and the guidance from the internal guide

The data has been prepared in consultation with the various personals of the organization directly. The results of the capital structure have been analyzed to give suggestions for the improvement of performance of organization. Information were taken from the balance sheets, government reports, websites and other financial statements of the company.

### 1.6 Limitation of the Study

The limitations of this study can be:

- 1. The result is based on secondary data that has its own limitations.
- 2. The period of study is confined to five years. (2007-12)
- 3. The study only covers the area of Himayath Nagar that may not be applicable to other areas.

# 2. Forms of Capital Structure

The company can employ any form of capital structure as

- a) Equity shares.
- b) Equity & preference shares.
- c) Equity shares & debentures.
- d) Equity, preference & debentures.

### 2.1Structure of Fund Sources



# 3. Data Analysis & Interpretation

### **3.1Financial leverage = EBIT/EBT**

**EBIT** – Earnings Before Interest And Tax, **EBT**- Earnings Before Tax.

	Table-1	: Calculation of Fin	ancial Leverage			
Particulars:	lars: 2007-2008 2008-2009 2009-2010 2010-2011 2011-2					
Calculation of EBIT:						
a)Net Profit:	7,10,23,306	14,00,12,935	4,24,27,836	2,38,95,843	1,39,82,402	
b)Interest: 1,42,31,899		1,62,65,159	1,91,58,383	1,13,88,612	1,54,93,016	
c)Tax:	1,69,50,191	7,36,02,809	1,44,84,351	1,17,69,595	69,83,756	
(I) EBIT (a+b+c) 10,22,05,396		22,98,80,903 7	7,60,70,570	4,70,54,050	3,01,73,774	
Calculation of EBT:						
EBIT:	10,22,05,396	22,98,80,903	7,60,70,570	4,70,54,050	3,01,73,774	
Less: Interest	1,42,31,899	1,62,65,159	1,91,58,383	1,13,88,612	1,54,93,016	
(II) <b>EBT</b> :	8,79,73,497	21,36,15,744	5,69,12,187	3,56,65,438	1,46,80,758	
Financial leverage:	1.161	1.076	1.336	1.319	2.055	
(EBIT/EBT (I/II))						

Source: Annual Reports



### Inferences:

The financial leverage signifies the impact of fixed interest charges on the returns to the shareholder. Company has reported an increasing trend in the financial leverage. A moderately high level of financial leverage is recommended as it yields in higher returns to the shareholders. Financial leverage of "APTDC" is growing constantly from 1.161 in 2007-08 to 2.055 in 2011-12 but this should not grow beyond the specific limits as very high financial leverage is risky to the concern.

### **3.2 Debt-Equity = External equity / Internal equity**

	10	ion-2. Carculatio	m of Debt Equit	· <b>J</b>	
Particulars:	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
I)Calculation of debt:					
a)Secured loans:	19,18,27,614	12,81,26,477	13,51,62,591	15,14,59,624	14,71,73,834
b)Unsecured loans:	1,65,88, 323	1,64,17, 887	1,73,44, 547	1,71,02, 203	1,46,73, 869
Total DEBT: I=(a+b)	20,84,15,937	14,45,44,364	15,25,07,138	16,85,61,827	16,18,47,703
II)Calculation of equit	y:				
c) Share capital:	3,76,12, 802	3,76,12, 802	3,76,12,802	3,76,12, 802	3,76,12, 802
d) Reserves & surplus:	3,97,94,555	17,98,25,298	22,24,37,210	24,63,33,053	26,03,15,455
Total EQUITY:II=(c+d)	7,74,07,357	21,74,38,100	26,00,50,012	28,39,45,855	29,79,28,257
Debt-Equity Ratio:(I/II)	2.69	0.66	0.58	0.59	0.54

Table-2:Calculation of Debt–Equity

Source: Annual Reports



### Inferences:

Debt-equity ratio is calculated to measure the extent to which debt financing has been used in a business. Interpretation of this ratio depends upon the:

I) Financial policy of the firm.

### **II**) Firm's nature of business.

A low value debt-equity ratio is considered as favorable to the firm from the long term creditor's point of view. Business has a high proportion of owners fund provide a larger margin of safety for them.

A high debt-equity ratio which indicates the claim of outsider are more (greater) than those of owner's and gives a lesser margin of safety for them at the time of liquidation of the firm.

The debt equity ratio of APTDC has been decreased from 2.69 in 2007-08 to 0.59 in 2011-12.

### 3.3 Overall Cost of Capital:

### Table-3 Calculation of Overall Cost of Capital

Particulars:	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Calculation of EB	IT:				
Net profit:	7,10,23,306	14,00,12,935	4,24,27,836	2,38,95,843	1,39,82,402
+ Interest:	1,42,31,899	1,62,65,159	19,15,383	1,13,88,612	1,54,93,016
+Tax:	1,69,50,191	7,36,02,809	1,44,84,351	11,76,595	69,83,756
EBIT: (I)	10,22,05,396	22,98,80,903	7,60,70,570	4,70,54,050	3,01,73,774
Calculation of value	uation of firm:				
A)Calculation of e	quity:				
i) Equity share capital:	3,76,12,802	3,76,12,802	3,76,12,802	3,76,12,802	3,76,12,802
ii)Reserves & surplus:	3,97,94,555	17,98,25,298	22,24,37,210	24,63,33,053	26,03,15,455
A=(i+ii)	7,74,07,357	21,74,38,100	26,00,50,012	28,39,45,855	29,79,28,257
B)Calculation of d	lebt:				
iii)Secured loans	19,18,27,614	12,81,26,477	1,35,16,591	15,14,59,624	14,71,73,834
iv)Unsecured loans:	1,65,88,323	1,64,17,887	1,73,44,547	1,71,02,203	1,46,73,869
B=(iii+iv)	20,84,15,937	14,45,44,364	15,25,07,138	16,85,61,827	16,18,47,709
Total value of the firm (II=A+B)	28,58,23,294	36,19,82,464	41,25,57,150	45,25,07,682	45,97,75,960
Cost of capital:	0.3575	0.6350	0.1843	0.1039	0.0656
Percentage:	35%	63.5%	18.43%	10.39%	6.56%

Source: Annual Reports



Inferences:

As there is always some business risk and financial risk involved in investing funds in a firm, cost of capital comprises of 3 components.

- I. The expected normal rate of return at zero risk level, say the rate of interest allowed by banks.
- II. The premium for business risk and
- III. The premium for financial risk on account of pattern of capital structure.

The overall cost of capital initially it is 0.3575 in the year 2007-08, and then it is increased to 0.6350 in the year 2007-08 and finally the cost of capital come down to 0.656 in the year 2011-12.

### 3.4 Debt Service (Or) Interest Coverage = Net Profit (Before Interest & Tax)/Fixed Interest Charges

Т	able-4 Calculat	ion of Debt serv	vice (or) Intere	est coverage	
Particulars:	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Net profit before interest & tax:					
Net profit:	7,10,23,306	14,00,12,935	4,24,27,836	2,38,95,843	1,39,82,402
+Interest:	1,42,31,899	1,62,65,159	1,91,58,383	1,13,88,612	1,54,93,016
+Tax:	1,69,50,191	7,36,02,809	1,44,84,351	1,17,69,595	69,83,756
EBIT: (I)	10,22,05,396	22,98,80,903	7,60,70,590	4,70,54,050	3,01,73,774
Fixed interest charges: (II)	14,23,14,899	1,62,65,159	1,91,58,383	1,13,88,612	1,54,93,016
Debt-Service Ratio:	7.18	14.13	3.97	4.13	1.95

Source: Annual Reports



### Inferences:

This ratio indicates the number of time interest is covered by the profits available to pay the interest charges. Generally higher the ratios safer are the long term creditors, because even if the earnings of the firm fall, the firm shall be able to meet its commitment of fixed interest charges.

But a too high interest coverage ratio may not be good for the firm because it may imply that the firm is not using debt as a source of finance.

# 3.5capital Gearing : Equity Share Capital + Reserves & Surplus/Preference Share Capital + Long Term Bearing Fixed Interest

Particulars:	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Equityshare capital:	3,76,12,802	3,76,12,802	3,76,12,802	3,76,12,802	3,76,12,802
Reserves & surplus:	3,97,94,555	17,98,25,298	22,24,37,210	24,63,33,053	26,03,15,455
(A)	7,74,07,357	21,74,38,100	26,00,50,012	28,39,45,855	29,79,28,257
Long-term debt:					

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Secured loans:	19,18,27,614	12,81,26,477	13,51,62,591	15,14,59,624	14,71,73,834
Unsecured loans:	1,65,88,323	1,64,17,887	1,73,44,547	1,71,02,203	1,46,73,869
<b>(B)</b>	20,84,15,937	14,45,44,364	15,25,07,138	16,85,61,827	16,18,47,703
(A/B)	0.37	1.50	1.71	1.68	1.84

Source: Annual Reports



### Inferences:

Capital gearing means the ratio between the various types of securities in the capital structure of the company. It has a direct bearing on the divisible profits of a company and hence proper capital gearing is very important for the smooth running of business or enterprise.

From the graph, it is noticed that the capital gearing ratio of APTDC has been increased from 0.37 in 2007-08 to 1.84 in 2011-12.

3.6	Cost of	debt:	(Interest/market	value of	debt)*100
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		able-6Calculati	on of Overall co	st of debt	
Particulars	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Interest: (A)	1,42,31,899	1,62,65,159	1,91,58,383	1,13,88,612	1,54,93,016
Market value of debt:					
a)Secured loans:	19,18,27,614	12,81,26,477	13,51,62,591	15,14,59,624	14,71,73,834
b)Unsecured loans:	1,68,55,323	1,64,17,887	1,73,44,547	1,71,02,203	1,46,73,869
<b>B</b> =( <b>a</b> + <b>b</b> )	20,84,15,937	14,45,44,364	15,25,07,138	16,85,61,827	16,18,47,703
A/B	0.0682	0.1125	0.1256	0.0675	0.095

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Source: Annual Reports



### Inferences:

The cost of debt in the year 2007-08 is 0.0682 and it has been increased to 0.095 in the year 2011-12.

## 3.7 Cost of equity $(K_e = K_o + (K_o - K_d)(D/E))$

Where,  $K_e$ :- Cost of Equity  $K_o$ :- Overall Cost of Capital  $K_d$ :- Cost of Debt D/E:- Debt -to- Equity

		Calcula	thon of Cost of Cy	uity	
Particulars	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Ko	0.358	0.635	0.184	0.104	0.066
K <sub>d</sub>	0.068	0.113	0.126	0.068	0.095
D/E	2.690	0.660	0.580	0.590	0.540
K <sub>e</sub>	1.136	0.980	0.218	0.125	0.050

# Calculation of Cost of equity

Source: Annual Reports

### 3.8 Weighted Average cost of capital

Once the component cost has been calculated, they are multiplied by the weights of various sources of capital to obtain WACC. The composite or overall cost of capital is the weighted average of the costs of various sources of funds, weights being the proportion of each source of fund in capital structure



### Inferences:

Capital gearing means the ratio between the various types of securities in the capital structure of the company. It has a direct bearing on the divisible profits of a company and hence proper capital gearing is very important for the smooth running of business or enterprise.

From the graph, it is noticed that the capital gearing ratio of APTDC has been increased from 0.37 in 2007-08 to 1.84 in 2011-12.

# 4. Conclusions

### 4.1. Findings

- 1. "Financial leverage" is growing, but this should not grow beyond the specified limits as very high financial leverage is risky to the concern.
- 2. From the calculations it is evident that "debt-equity ratio" is decreasing from 2.69 in the year 2007-08to 0.54 in the year 2011-12, which can be accepted as favorable to "APTDC".
- 3. "Debt-service" has been decreased from 7.181 to 1.947 in the period of study i.e., from 2007-12.
- 4. "Capital gearing ratio" increased from 0.371 to 1.840 during the year 2007-12. "Cost of debt" increased from 0.0682 to 0.095 during the year 2007-12.
- 5. "Financial leverage" has been increased from 1.161 to 2.055 during the year 2007-12.
- 6. "Cost of capital" has declined from 0.3575 to 0.0656 during the year 2007-12.

### 4.2. Suggestions

- 1. The organization should take care of financial leverage, as it is increased from the 2007-08 to 2011-12, it should not grow beyond a limit.
- 2. Cost of debt has been increased, so firm should try to acquire the funds at low cost to attain more profits.

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- 3. As the reserved to equity ratio has increasing trend in the period of study, so the firm may establish new branches to provide more and more services to people, by the effective utilization of retained earnings(profits)
- 4. More branches of APTDC should be opened in each part of the country so that it may be feasible for all the people to utilize APTDC's resources effectively.

# **4.3 Conclusions**

After analyzing the financial position of "APTDC" & evaluating its 'capital structure analyses' in respect of analysis and source and utilization of funds.

The following conclusions are drawn:

"Debt-equity ratio" decrease in the period of study i.e.2007-2012.

From the above we can say that financial position of the APTDC is quite satisfactory.

The value of the firm, financial leverage, proportion of reserves to equity has been increased.

Cost of capital has been decreased from 2007-12 which is favorable to growth of the firm, and debt-serving capacity of the firm has been decreased, and firm must try to concentrate for improving this to a extent.

# **5. References**

### 5.1 Books

- Prasanna Chandra (2001), Financial management (edition), TATA M.C Graw Hill, New Delhi.
- M.Pandey (2002), *Financial management* (edition), VIKAS Publishers, Hyderabad
- Khan & Jain (2001), Financial management (edition), TATA M.C Graw Hill, New Delhi.
- Rustagi, Financial management.

### 5.2 Journals & Magazines:

- Finance India/Vol 4/2004
- Indian journal of finance
- Financial express
- Economic times

### 5.3 Web Sites:

- www.wikipedia.com
- www.google.com
- www.aptourism.co.in
- www.aptourism.travel

#### Appendix-Tables

Table1: Financial Leverage
Table2 : Debt- Equity Analysis
Table3 : Cost of Capital
Table4 : Debt Servicing Capacity
Table5 : Capital Gearing Analysis
Table6 : Cost of Debt
Table7 : Cost of Equity