IMPACT OF CAPITAL STRUCTURE ON FIRM'S VALUE OF SELECTED INDIAN TEXTILE COMPANIES

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ABSTRACT

Modigliani& Miller have shown the impact of Debt Equity ratio on firm's value in their Capital Structure theory. This theory has been debated by several finance experts over the period of time and new alternative Capital Structure theories have been developed. Inspite of several studies against these theories the basic concepts of Modigliani & Miller theory have proved their importance in explaining impact of capital structure on firm's value. This study aims at analyzing the extent to which the firm's capital structure affects the value of firm for selected Indian Textile companiesconsidering share price as proxy for value and different ratios for capital structure decision. Share price reflecting the firm's value and relevant capital structure variables for the period of ten years from 2005-2014 have been taken for this analysis. The overall impact of capital structure variables on firm's value have been examined using multiple regression analysis. It is found that Long term debt to total assets is highest contributing variable for textile sector. EPS and Dividend pay- out ratio has positive significant impact on share price for textile sector as a whole. Long term debt to total assets has negative significant impact on share price. The inter comparison between the selected companies has also been done as regards their relationships between capital structure and firm's value.

Key words: Share Price, Capital Structure, Firm Value, Wealth Maximization, Multiple Regression Analysis.

INTRODUCTION:

It is general understanding that corporate enterprises raise their capital from diverse sources such as the issue of shares, debentures, long-term loans, short-term loan and plugging back of profits. Accordingly, in the procurement of capital from diverse sources, as also in the subsequent commitment of the said capital to various assets, certain proportion or combination of various elements have to be maintained. This arrangement of capital is called **capital structure.** A company applies its assets in its business to generate a stream of operating cash flows. After paying taxes, the firm makes distributions to the providers of its capital and retains the balance for use in its business. If company is all equity financed, the entire after-tax operating cash flow each period accrues to the benefit of its shareholders (in the form of dividend and retained earnings). If instead the company has borrowed a portion of its capital, it must dedicate a portion of the cash flow stream to service this debt. Moreover, debt holders have the senior claim to a company's cash flow; shareholders are only entitled to the residual. The company's choice of capital structure determines the allocation of its operating cash flow each period between debt holders and shareholders. The debate over the significance of a company's choice of capital structure is esoteric. But, in essence, it concerns the impact on the total market value of the company (i.e.; the combined value of its debt and its equity) of splitting the cash flow stream into a debt

component and earn equity component. Financial experts traditionally believed that increasing a company's leverage, i.e. increasing the proportion of debt in the company'scapital structure, would increase value up to a point. But beyond that point, further increases in leverage would increase the company's overall cost of capital and decrease its total market value. The Indian textile industry is one the largest and oldest sectors in the country and among the most important in the economy in terms of output, investment and employment. The sector employs nearly 35 million people and after agriculture, is the second-highest employer in the country.

LITRETURE REVIEW

AnupChowdhury, Suman Paul Chowdhury(2010)

in their study on Impact of capital structure on firm's value: Evidence from Bangladesh found that maximizing the wealth of shareholders requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and it has to be as minimum as possible and changing the capital structure composition a firm can increase its value in the market. **Ogbulu et al (2012)** conducted study on Capital Structure and Firm Value: Empirical Evidence from Nigeria. The result of the study reveals that in an emerging economy like Nigeria, equity capital as a component of capital structure was irrelevant to the value of a firm, while Long-term-debt was found to be the major determinant of a firm's value. Following from the findings of this study, corporate financial decision makers were advised to employ more of long-term-debt than equity capital in financing their operations since it results in a positive firm value. **Raj S Dhankar and Ajit S Boora (September-1996)** conducted the study on Cost of Capital, Optimal Capital Structure and Value of Firm: An Empirical Study of Indian Companies. The results suggest that though cost of capital decreases when leverage increases, this decrease is very moderate and not proportional to debt level. Probably, it is for this very reason that most of the companies are not high leveraged. The relationship between change in capital structure and dividend policy was not found definite and statistically significant. **Ashok Kumar Panigrahi (2009)**conducted a study on Capital Structure of Indian Corporate: Changing Trends and find out the ways in which different companies at different times and in different institutional environments have financed their operations and to identify possible implications of these financing patterns. The central issue addressed was to examine the trend of changes in the capital structure of Indian companies and impact of liberalization on the capital structure decisions of Indian companies. He also tries to find out the factors that determine the financing pattern of capital structure of Indian companies, particularly in the private sector. **Janki (September-2011)** carried out a study on Capital Structure and Profitability Relationship: An Empirical Analysis of Indian Large Scale Steel Sector. The analysis revealed very interesting outcomes, some of which are in line with theoretical propositions. Multiple regression analysis revealed that ROE was very much significantly dependent together on independent variables in case all sample companies and the industry.

RESEARCH METHODOLOGY

The present study is based on the capital structure of the selected companies of the textile industry of India .The basic problem of this study is to see that composition of the capital structure of the companies. This composition is useful to the companies to achieve the value of firm in terms of the different stakeholders. This will also act as a guide for the financial managers to design their optimum capital structure to maximize the market value of the firm and minimize the agency cost.

Objectives of study:

- To understand the concept of capital structure.
- To test the influence of debt-equity structure on the value of shares given different sizes, industries and growth opportunities with the companies.

- To study the impact of capital structure on the value of firm.
- To make comparative study of selected companies.

Sample size:

To study capital structure of textile sector we have selected 5 textile companies in India.The analysis of capital structure is based on secondary data of 10 years commencing from 2005 and ending in 2014. Selected companies are:

- Bombay rayon and fashion Ltd
- Vardhman Textiles Ltd
- Grasim industries Ltd
- Vijay Textiles Ltd
- Yarn syndicate Ltd

TOOLS AND TECHNIQUES:

The Multiple Regression Analysis is carried out to find out effect of various components on capital structure. The model used is as follows:

$PRICE = \alpha + \beta_{1*}EPS_{it} + \beta_{2*}DPRATIO_{it} + \beta_{3*}PUBLIC_{it} + \beta_{4*}FATO_{it} + \beta_5 *LTDEBTAS_{it} + \beta_{6*}CURATIO_{it} + \beta_7 * OPERLEV_{it} + \beta_{8*} SALESGR + \varepsilon_{it}$

Where,

EPS= Earnings per share
DP ratio= Dividend pay-out ratio
PUBLIC SH=Public shareholding
FATO= fixed assets turnover ratio
LTDEBTAS= Long term debt to total asset
CURATIO=Current ratio
OPERLEV=Operating leverage
SALESGR=Sales growth

Table: 1- Description of Variables

	Share price at the end of the financial year
EPS	$\frac{\text{PAT} - \text{preference share dividend}}{\text{no. of equity share}}$
Dividend pay- out ratio	$\frac{\text{Dividend per share}}{\text{EPS}}$
Public share holding	Institutional shareholding + Non institutional shareholding
Fixed assets turn-over ratio	$\frac{\text{Sales}}{\text{Fixed assets}}$
Long term debt to total assets	$\frac{\text{Total debt}}{\text{Total assets}}$
Current ratio	$\frac{\text{Current assets}}{\text{current liability}}$
Operating leverage	$\frac{\text{Contribution}}{\text{EBIT}}$
Sales growth	$\frac{\text{Change in sales}}{\text{last year's sales}}$

DATA ANALYSIS AND INTERPRETATION:

Table-2 Result of Regression Analysis

	Overall	Company wise				
Variables		Bombay Rayon and Fashion Ltd.	Vardhman Textiles Ltd	Grasim Industries Ltd	Vijay textiles Ltd	Yarn Syndicate Ltd
Constant	618.402 (0.012)	-242.557 (0.713)	-1917.290 (0.625)	15627.270 (0.529)	862.538 (0.803)	-113.976 (0.198)
EPS	18.921* (0.001)	3.088 (0.501)	-8.645 (0.610)	9.639 (0.296)	-6.319 (0.837)	0.069 (0.554)
DPR	18.944* (0.010)	4.174 (0.543)	25.020 (0.418)	150.263 (0.654)	0.745 (0.900)	
FATR	-4.697 (0.887)	-55.019 (0.308)	308.349 (0.475)	958.800 (0.775)	92.300 (0.712)	0.383 (0.145)
CR	-5.272 (0.487)	-41.037 (0.414)	67.796 (0.748)	320.231 (0.768)	-1.385 (0.724)	0.146 (0.059)
SALES Growth	-1.740 (0.161)	1.982 (0.450)	1.00 (0.927)	-3.737 (0.842)	-0.568 (0.818)	0.003 (0.758)
Op.Leverage	0.716 (0.298)	4.148 (0.721)	9448.504 (0.406)	1778.957 (0.946)	3.319 (0.781)	-3.873 (0.269)
Pub.ShareHolding	-3.176 (0.515)	-0.122 (-0.25)	4.645 (0.947)	-323.126 (0.429)	-16.719 (0.798)	3.563 (0.195)
LTDTA	-1035.277* (0.000)	1179.591 (0.428)	169.854 (0.751)	1643.707 (0.778)	-81.019 (0.884)	-4.537 (0.405)
R square	0.898	0.917	0.914	0.950	0.940	0.955
F.Change	38.999	1.378	1.333	2.395	1.950	6.067
Significant F	0.000	0.581	0.588	0.464	0.506	0.149
D.W	1.325	3.545	2.955	3.401	2.560	3.322

A. Overall Analysis

Estimated Model:

SP=618.402+18.921*EPS*+18.944*DPR*-4.697*FATR*-5.272*CR*-1.740*SALESGR*+0.716*OPLEV*-3.176*PUBSHARE*-1035.277*LTDTA*

The above table shows the result of regression analysis. It shows that there is positive significant impact of EPS and DPR on Share price whereas negative significant impact of LTDTA on Share Price. It shows that there is positive impact of OPLEV on Share price whereas negative impact of CR, Sales growth and public shareholding on Share Price. The value of R-square equals to 0.898, indicating that 89.8 percentage variations in SP is explained by all the independent variables jointly and hence model is powerful. According to regression analysis Durbin Watson is 1.325 which is less than 2 that indicates that there exists the relationship of positive auto-correlation.

B. Company-Wise Analysis:

1. Bombay Rayon And Fashion Ltd

SP= -242.557+3.088EPS+4.174DPR-55.019FATR-41.037CR+1.982SALES GR+4.148OPLEV-0.122PUB.SHARE HOLDING+1179.591LTDTA

There is positive impact of *EPS,*DPR, SALESGROWTH,OPLEV and LTDTA on Share price. FATR, CR andPublicShareholding have negative impact on Share price. LTDTA is highest of all variables which is 1179.591 which means LTDTA has highest contribution to shareprice square is equal to 0.917 which is 91.7 percentagevariations in s shareprice explained by all the independent variables jointly and hence model is powerful. Durbin Watson is 3.545 which is greater than 2 indicating negative auto correlation among variables under study.

2. Vardhman Textiles Ltd

SP=-1917.290-8.645*EPS*+25.020*DPR*+308.349*FATR*+67.796*CR*+1.00*SALES GR*+9448.504*OPLEV*+4.645*SHARE HOLDING*+169.854*LTDTA*

There is positive impact of DPR, FATR, CR, SALESGROWTH, OPLEV, PublicShareholding, and LTDTA on Share price. EPS has negative impact on Share price. OPLEVERAGE is highest of all variables which is 9448.504 which means OPLEVERAGE has highest contribution to Share Price. R square is equal to 0.914 which is 91.4 percentage variations in Shareprice explained by all the independent variables jointly and hence model is powerful. Durbin Watson is 2.955 which is greater than 2 indicating negative auto correlation among variables under study.

3. Grasim Industries Ltd

SP=15627.270+9.639*EPS*+150.263*DPR*+958.800*FATR*+320.-231*CR*-3.737*SALESGR*+1778.957*OPLEV*-323.126*PUB.SHARE HOLDING*+1643.707*LTDTA*

There is positive impact of *EPS*,DPR, FATR, CR, OPLEV and LTDTA on Share price. SALESGROWTH and Publicshare holding has negative impact on Share price. OPLEVERAGE is highest of all variables which is 1778.957 which means OPLEVERAGE has highest contribution to shareprice. R square is equal to 0.950 which is 95 percentage variations in share price explained by all the independent variables jointly and hence model is powerful. Durbin Watson is 3.401 which are greater than 2 indicating negative auto correlations among variables under study.

4. Vijay Textiles Ltd

SP= 862.538-6.319*EPS*+0.745*DPR*+92.300*FATR*-1.385*CR*-0.568*SALES GR*+3.319*OPLEV*-16.719*PUB.SHARE HOLDING*-81.019*LTDTA*

There is positive impact ofDPR, FATR, OP. LEVERAGE on Share price. EPS, CR, SALESGROWTH and Public shareholding, LTDTA has negative impact on Share price. FATR is highest of all variables which is 92.300 which means FATR has highest contribution to share price. R square is equal to 0.940 which is 94 percentage variations in share price explained by all the independent variables jointly and hence model is powerful. Durbin Watson is 2.560 which is greater than 2 indicating negative auto correlation among variables under study.

5. Yarn Syndicate Ltd

SP=-113.976+0.069*EPS*+0*DPR*+0.383*FATR*+0.146*CR*+0.003*SALESGR*-3.873*OPLEV*+3.563*PUB.SHARE HOLDING*-4.537*LTDT*A

There is positive impact of *EPS*, FATR, CR, SALESGR, and Public shareholding on Share price. OPLEV and LTDTA has negative impact on Share price. DPR is excluded variable. public shareholding is highest of all variables which is 3.563 which means public shareholding has highest contribution to share price. R square is equal to 0.955 which is 95.5 percentage variations in share price explained by all the independent variables jointly and hence model is powerful. Durbin Watson is 3.322 which is greater than 2 indicating negative auto correlation among variables under study.

FINDINGS:

- From Regression analysis of industry as a whole it is found that Long term debt to total assets is highest contributing variable. EPS and Dividend pay- out ratio has positive significant impact on share price. Long term debt to total assets has negative significant impact on share price. For industry as a whole EPS, dividend pay-out ratio and Long term debt to total assets are significant determinants of share price.
- In case of Bombay Rayon and Fashion Ltd, EPS, Dividend pay -out ratio, Sales growth and Long term debt to total asset has Positive impact on Share price. . Fixed asset turnover ratio, Current Ratio, Public shareholding has negative impact on Share price. Long term debt to total assets has highest contribution to share price.
- For Vardhman Textiles Ltd, *Dividend* pay- out ratio, Fixed asset turnover ratio, Current ratio, Sales growth , Operating Leverage, Public shareholding, Long term debt to total assets are positive impact on Share price. Operating leverage has highest contribution to share price.
- For Grasim Industries Ltd, *EPS*,Dividend pay- out ratio, Fixed asset turnover ratio, Current ratio, Operating Leverage, Long term debt to total assetsare positive factors affecting Share price. Sales growth and public shareholding are negative factors affecting Share price. Operating leverage has highest contribution to share price.
- For Vijay Textiles Ltd, Dividend pay- out ratio, fixed asset turnover ratio and Operating Leverage are having positive impact on Share price. EPS, Current ratio, Sales growth, Public shareholding and Long term debt to total asset has negative impact on Share price. Fixed asset turnover ratio has highest contribution to share price.
- In case of Yarn Syndicate Ltd, *EPS*, Fixed asset turnover ratio, Current ratio, Sales growth and Public share-holding are positive determinants of Share price. Operating leverage and Long term debt to total assets are negative determinants of Share price. Dividend payout ratio is excluded variable. Public shareholding highest contribution to share price.

CONCLUSION:

- For Textile sector, EPS and Dividend pay-out ratio are the most important determinant affecting Share price positively where as Long term debt to total assets is most important determinant affecting Share price negatively.
- The interesting finding of this paper suggests that maximizing the wealth of shareholders requires a perfect combination of debt and equity. This is also observed that by changing the capital structure composition a firm can increase its value in the market. Nonetheless, this could be a significant policy implication for finance managers, because they can utilize debt to form optimal capital structure to maximize the wealth of shareholders

References:

- A.M.Goyal(2013) "Impact of Capital Structure on Performance of Listed Public Sector Banks in India", International Journal of Business and Management Invention, Volume 2 Issue 10,Oct 2013, P.p 35-43, ISSN: 2319 – 801X.
- AnupChowdhury, Suman Paul Chowdhury(2010) " Impact of capital structure on firm's value: Evidence from Bangladesh" Peer-reviewed and Open access journal. Volume 3,Issue 3 Oct 2010,p.p no 111-122,ISSN: 1804-1205.
- Ashok Kumar Panigrahi(2010)"Capital Structure of Indian Corporate: Changing Trends" Asian Jo urnal Of Management Research, ISSN 2229– 3795.
- Nirajiniet.al(2013) "Impact of Capital Structure on Financial Performance of the Listed Trading Companies in Sri Lanka". International Journal of Scientific and Research Publications, Volume 3, Issue 5 May 2013,ISSN 2250-3153.
- Ram Chandra Das, Pro. Nikhil BhusanDey(2013) "Capital Structure Analysis of Selected Petroleum Companies in India- An Empirical Study" Indian Journal Of Applied Research, Volume : 3,Issue Aug 2013,ISSN - 2249-555X.
- HinaAgha(2015)"Determinents Of Capital Structure Of Cement Sector In Pakistan". European Scientific Journal, vol.11, No.13 May 2015, ISSN: 1857 – 7881.
- OGBULU et al (2012) "Capital Structure and Firm Value: Empirical Evidence from Nigeria", International Journal of Business and Social Science, Vol. 3 No. 19 Oct 2012.
- SamraKiran(2013) "Determinants of Capital Structure: A Comparative Analysis of Textile, Chemical & Fuel and Energy Sectors of Pakistan" International Review of Management and Business Research, Vol. 2 Issue.1,March 2013,ISSN: 2306-9007.
- Ashok Kumar Panigrahi. May-2009. "Capital Structure of Indian Corporate: Changing Trends" Asian journal of management research. PP: 283 to 298.
- Jnaki.September-2011. "Capital Structure And Profitability Relationship: An Empirical Analysis Of Indian Large Scale Steel Sector"
- Raj S Dhankar and Ajit S Boora. July-September-1996. "Cost of Capital, Optimal Capital Structure, and Value of Firm: An Empirical Study of Indian Companies". Vol. 21, No. 3.PP: 29 to 36.

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