

Analyzing the Pattern of Capital Structure of Textile Industries of India

Dr. S. Subhashini

(Rathinam Institute of Management, Echanari Road, Coimbatore, India)

I. INTRODUCTION

Apparel has retained an important place in human life starting from historical era to today's modern world. The Indian textile and clothing industry provides a valuable wealth of craftsmanship both skilled and semi-skilled work force which is the major contributor towards the development of apparel units. Textile and apparel industries are vital parts of the world economy, providing employment to tens of millions, mostly, women workers in nearly two hundred countries. The garment industry is experiencing production and organizational changes globally, with deepening trade activity altering employer – employee relations. Over the past 3-4 decades, trade restrictions, price and quality; have come to play a major role in conditioning the patterns of the sector's development. The Textile industry occupies an important place in the Economy of the country because of its contribution to the industrial output, employment generation and foreign exchange earnings. The textile industry encompasses a range of industrial units, which use a wide variety of natural and synthetic fibres to produce fabrics. The below figure provides the division of Textile industries. At this juncture, the study on capital structure attempts to explain the mix of securities and financing sources used by companies to finance investments (Myers, 2001). Brigham, (2004) referred to Capital structure as the way in which a firm finances its operations which can either, be through debt or equity capital or a combination of both. According to Myers, (2001), there was no universal theory on the debt to equity choice but noted that there were some theories that attempted to explain the capital structure mix.

Statement of the problem

Changing the existing capital structure involves the consideration of the amount and forms of financing. Debt is inevitable option at firm and country level, especially in emerging economies (Abor and Biekpe 2006; Erol, 2004). It is beneficial for a company to mix its borrowed capital with owner's capital, because such a capital structure helps increase the shareholders' return. Under normal circumstances, employing debt along with equity (Financial leverage) will yield higher Earnings per Share (EPS) thereby increasing the dividend declaring capacity which in turn enhances the value of the company. Therefore, the value of the firm is expected to be influenced by its financial leverage. However, the use of debt is a double edged sword; it may increase the profitability of a firm as well as risk. It is clear that deploying debt has positive as well as negative effects. All depends on the utilization of the funds. Moreover, the interactions between management, shareholders, and debt holders will generate frictions which are due to agency problem. Agency problem may entail underinvestment or over investment incentives. Therefore, the firm has to rely on only external funds to finance the new projects. Sometimes, the external funds are more expensive and it may lead to lower growth (Lang, Ofek, and Stulz, 1996). Numerous theoretical and empirical studies have challenged this point by arguing that financing considerations considerably complicate the investment relationship (Odit and Chittoo, 2011) and thereby firm's performance. For instance, highly levered firms are less likely to exploit valuable growth opportunities as compared to firms with low leverage levels (Myers, 1977). In extreme cases a firm's debt overhang does not permit it to raise funds for positive net present value (NPV) projects. This motivates author to do research on this issue. The central question that this paper aims to answer is whether financial leverage influences the firm performance or not. While referring to the extent literature, it shows mixed results in terms of relationship between financial leverage and firm performance. In addition, previous studies used OLS method, such as McConnell and Servaes (1995), Agarwal and Zhao (2007), Weill (2007), to analyse the effect of financial leverage on performance by ignoring the individual firm effects. Modigliani and Miller's (1958) study gave a substantial boost to the development of a theoretical framework that has since been used by most financial studies (Abor 2005). Modigliani and Miller (1958) concluded that capital structure is irrelevant to determining a firm's value (Ebaid 2009). A study by Saedi and Mahmoodi (2011) examines the relationship between capital structure and firm performance the study used sample of 320 firms listed on Tehran Stock exchange over the period 2002- 2009. Except all of the financial companies and banks, the study uses four performance measures (including ROA, ROE, EPS and Tobin's Q) as dependent variable and three capital structures (including long- term debt short term debt and total debt ration) as independent variable. The study indicated that firm performances, which is measured by EPS and Tobin's Q, is significantly and positively associated with capital structure, while reported a negative relation between capital structure and ROA, and no significant relationship between ROE and Capital structure. A study by Saedi and Mahmoodi (2011) examines

the relationship between capital structure and firm performance the study used sample of 320 firms listed on Tehran Stock exchange over the period 2002- 2009. Except all of the financial companies and banks, the study uses four performance measures (including ROA, ROE, EPS and Tobin s Q) as dependent variable and three capital structures (including long- term debt short term debt and total debt ration) as independent variable. The study indicated that firm performances, which is measured by EPS and Tobin s Q, is significantly and positively associated with capital structure, while reported a negative relation between capital structure and ROA, and no significant relationship between ROE and Capital structure. Githire, C. and Muturi, W. (2015) examined the effect of capital structure on the performance of firms listed on the Nairobi Securities Exchange. The study used the data of firms listed on the Nairobi Securities Exchange and a census of all firms listed on the Nairobi Securities Exchange from year 2008-2013 was the sample. Secondary data were obtained from the published annual reports and financial statements of the listed companies at the NSE covering the years 2008 to 2013. Multiple regression analysis method was used to analyze and test the hypotheses. The findings showed that equity and long term debt had a positive and significant effect on financial performance, while short term debt had a negative and significant effect on financial performance.

This study extends the earlier analysis by using a panel data methodology to control for heterogeneity among individual firms and identify the robust method that recognizes the impact of capital structure on firm performance of listed textile firms in India; to what extent the financial ratios are showing the performance of Textile industry over a period of time.

Sample Size and Sampling Method

Textile industry in India is broadly categorized in to 27 sectors. The study covers only 15 major sectors. Keeping in view of the scope of the study, it is decided to include all the textile companies under Indian textile industry working during the years 2003 to 2014. But, owing to several constraints such as the non-availability of financial statements or the non-working of a company in a particular year and merger and acquisition etc., it is compelled to restrict the number of sample companies to 109.

The second major issue for analysis is the performance of Textile units in terms of capital invested and turnover. This study is to establish the performance of sectoral analysis and act as key information to the investors and shareholders to their further investment. The third major issue for analysis is the efficiency of management in utilization of assets for effective functioning of textile companies. This study is to establish the performance of sector analysis and act as key information.

The following objectives are taken for the study.

To examine the magnitude of influence of various factors affecting the capital structure decisions of sample companies under study and to identify the relationship between capital structure and firm performance.

Hypothesis

- Ho1: Debt- equity ratios related to the various industrial sectors and the firms under study are similar*
Ho2: There is no significant difference in the cost of debt among the selected companies and the years

II. RESULTS AND ANALYSIS

Capital Structure of Indian Textiles Industries:

Capital structure is the mix of debt and equity securities that are used to finance companies assets. It is defined as the amount of permanent short-term debt, preferred stock, and common equity used to finance a firm. Financial structure is sometimes used as synonymous with capital structure. However, financial structure is more comprehensive in the sense that it refers to, in aggregate; the amount of total current liabilities, long-term debt, preferred stock, and common equity used to finance a firm. Therefore, capital structure is only a part of financial structure, which refers mainly to the permanent sources of the firm's Financing.

Trend of Capital Structure and Financial Performance of Various Sectors of Indian Textile Industry

Debt to Equity Ratio:

Nature of capital structure of the sample companies is determined by the debt equity ratio of the individual company pertaining to the year of reference. Thereafter, average of debt to equity ratio was calculated for the sample of 109 companies distributed on 15 major sectors of the Indian Textile industry. Average debt to equity ratio for the period from 2003-4 to 2013-14, highlighting the extent of leverage of the sectors is presented in Table1.

Table1: Average debt to equity ratio for the various Sectors of Textile Industry for the period from 2003-4 to 2013-14 (Figures in parenthesis indicate debt to equity ratio)

D/E Ratio	Industry	Extent of leverage
below 0.5	Rayon(0.34), Textile Machinery(0.24)	Low
0.5 to 0.99	Silk(0.51)	Medium

1.0 to 1.49	Cotton yarn open ended spinning(1.36), Hosiery knitwear(1.02), Jute yarn(1.41), Man made ppfy (1.28), Socks(1.19), Texturising (1.37),Weaving (1.14)	Average
1.50 and above	Readymade apparel(1.50), Spinning Cotton Blended(2.16),Cotton yarn 100%(3.54),Processing (1.51),Spinning Synthetic Blended(2.41)	High

Source: compiled from the CMIE Data

The analysis indicated that, the debt equity ratios of the textile sectors covered in the study lie within the range of 0.24 to 3.54. The lowest ratio (0.24) observed in the case of Textile Machinery industry and the highest in Cotton yarn 100% (3.54) sector. However, in the Silk(0.51), Cotton yarn open ended spinning(1.36), Hosiery knitwear(1.02), Jute yarn(1.41), Manmade ppfy(1.28), Socks(1.19), Texturising (1.37), Weaving(1.14) were observed on Average in Debt to equity ratio, High ratio is observed Readymade apparel(1.50), Spinning Cotton Blended(2.16), Processing (1.51) and Spinning Synthetic Blended(2.41). High debt ratios were seen in Givo Limited, Maral Overseas Limited, Spentex Industries and Patspin India Ltd of above 5. The Cotton Yarn 100% is also subject to large variations in the debt ratios. But it was found that much of this is attributed to Maral Overseas having very high debt ratios.

Sector-Wise Analysis On Size, Growth, Liquidity, Dividend, Profitability And Leverage

Sector-wise analysis on Size, Growth, Liquidity, Dividend, Profitability and Leverage of the companies was made to examine the variation within an industry, and to examine on the performance of the firm compared with industry on the whole has performed well or not. Results of classification of all selected companies into 15 broad sectors along with average for each sector for the entire five financial ratios for examining on their financial performance are indicated.. More descriptive analysis based on the table has been computed. For this purpose correlation analysis has been used to establish the relationship between these five ratios within industry to get an insight into the variation in their financial performance. Sector-wise comparison on Size, Growth, Liquidity, Dividend, Profitability and Leverage is presented in below Table2

Table2: Sector-wise comparison on Size, Growth, Liquidity, Dividend, Profitability and Leverage

S.No	Sector of Textile Industry	Size	Growth	Liquidity	Profitability	Leverage	Dividend
1	Readymade apparel	134.43	17.31	5.30	15.01	1.50	10.34
2	Spinning Cotton Blended	195.97	31.75	1.14	10.77	2.16	9.73
3	Cotton yarn 100%	276.98	-61.07	1.16	7.31	3.54	11.69
4	Cotton yarn open ended spinning	241.73	407.93	2.56	16.84	1.36	18.54
5	Hosiery knitwear	411.49	-172.23	4.98	3.08	1.02	26.30
6	Jute yarn	98.66	42.75	1.36	9.97	1.41	11.27
7	Man made ppfy	395.19	13.29	1.58	10.13	1.28	88.24
8	Processing	127.82	-17.44	1.47	9.13	1.51	7.23
9	Rayon	3356.39	32.78	0.76	4.46	0.34	10.35
10	Silk	789.42	-27.09	2.34	7.14	0.51	27.31
11	Socks	453.24	47.22	3.50	11.95	1.19	6.65
12	Spinning Synthetic Blended	451.93	-82.56	1.14	12.40	2.55	6.32
13	Textile Machinery	131.09	100.62	1.79	9.61	0.24	18.37
14	Texturising	142.66	62.63	1.43	21.45	1.37	18.00
15	Weaving	136.05	96.29	1.99	-3.00	1.14	21.20

Source: Computed by the Researcher from CMIE Database

Analysis Of Variance Test For Testing The Difference In Size, Growth, Liquidity, Dividend, Profitability And Leverage Among The Various Sectors

Table3: Results of the ANOVA Test for the difference in cost of debt among the various sectors
ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Cost_Of_Debt	Between Groups	733.823	14	52.416	0.355	0.984
	Within Groups	13859.75	94	147.444		
	Total	14593.57	108			

It is evident from the ANOVA table that the calculated value of F is 0.355 as against the table value of 1.96 respectively at five per cent level of significance. The p-value of significance is 0.984 higher than 0.05, it indicate that null hypothesis is accepted. Hence, it is concluded that there is no significant difference in the cost of debt among the selected large scale Textiles companies and also among the sector during the study period.

III. CONCLUSION

Indian textile industry is an independent and self reliant industry. It has large and potential domestic and international market. But the industry is highly fragmented industry depend on cotton. Lack of technological development, the growth of industry becomes decline. Even labor laws are not favorable. The study has analyzed the capital structure and profitability position of 109 textile companies across 15 selected sectors of Textile industry in India; some of the important ratios were used to measure the financial performance of selected companies. Based on the above analysis the overall performance of the major sectors and the individual companies were assessed on the firm wise, it is further investigated whether within an industry as a whole any variations are observed in terms of five ratios, i.e. on Growth, liquidity, Dividend, Profitability and Leverage of the companies. hat most of the industries on the whole have performed above the industry average on the five ratios. On readymade apparel, 50% of the companies have capital employed above average, on growth, 10 companies are above average. On liquidity front, the sector performed better maintained adequate liquidity. Profitability firm, more than 50% firms are in profit. On leverage part, four companies alone hold higher debt-equity ratio. Dividend distribution to shareholders is quite less indicating it has been utilized for business. On comparison, the readymade apparel sector has performed better and higher than industry average.

Suggestions

In view of the findings of the study, the following suggestions are made which would go a long way to improve the capital structure and profitability position of Indian textile industry.

IV. REFERENCES

- [1] Modigliani, F and Miller, M.H. (1958). *The cost of capital, corporation finance and the theory of investment*, American Economic Review, June, pp. 261-297.
- [2] Abor, J. (2005), "The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana", *Journal of Risk Finance*, Vol. 6 pp.438-47.
- [3] Ibrahim El-Sayed Ebaid (2009) "The impact of capital-structure choice on firm performance: empirical evidence from Egypt", *The Journal of Risk Finance*, Vol. 10 Iss: 5, pp.477 – 487
- [4] Myers, S. C. and Majluf, N. S. (1984). *Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have*. *Journal of financial Economics*, Vol. 13, pp. 187-221.
- [5] C. W. Smith Jr. and E. Morellec, "On the Debt Capacity of Growth Options," *Journal of Business*, Vol. 79, No. 1, 2006, pp. 37-59. <http://dx.doi.org/10.1086>.
- [6] Magara, M. (2012), *Capital structure and its determinants at the Nairobi Securities Exchange*, Unpublished Management Research Project of the University of Nairobi.
- [7] Githire, C. and Muturi, W (2015), " Effects of Capital Structure on Financial Performance of Firms in Kenya: Evidence from Firms Listed at The Nairobi Securities Exchange", *International Journal of Economics, Commerce and Management*, Vol. III, Issue 4 , pp. 1-10, ISSN 2348 0386