

A Study on Capital Structure Pattern of Small and Medium Enterprises (SMEs)

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Abstract: *The present empirical study focuses on the trends in financing pattern as well as composition of capital structure of SMEs Small and Medium Enterprises (SMEs). The financial performance was evaluated by accessing the long-term solvency of assets using various financial ratios. The secondary data collected for a period of four years from 2010-2013 was used in the study. The quantum and structure of total funds in selected SMEs was also analyzed. The results revealed that the long term funds had apportioned nearly two-third of total funds when compared to short term funds employed. Since the firms showed more dependence on equity financing the associated financial risks were comparatively low. The companies were found to have not using their debt to the best advantage of the shareholders as revealed by a higher interest coverage ratio. The study explicates the influence of the capital structure in financial performance of SMEs. An optimal capital structure maximizes the shareholder's wealth with best combination of debt and equity mix thereby minimizing the cost of capital.*

I. Introduction

As stated in the Modigliani and Miller theorem of investment (1958), the analysis of capital structure and its proportions are one of the most important themes in the corporate finance theories. The term 'capital structure is generally used to define the proportion of debt and equity deployed by a company to finance its assets (Srivasthava, 2012). Capital structure is the part of financial investment, which represents long term sources. The choice of suitable source of fund for capital structure is one of the major policy decisions taken by a firm. It is the permanent financing of the company represented primarily by shareholder's funds and long term debt and excluding all short-term credits. The capital structure proposition shows how a firm plans to finance its projects to meet its primary objective. For each firm, the proportion of capital structure varies largely and the market value of the firm is independent of its capital structure composition. In fact, proportion determines how the profit should be divided between creditors and the company owners. As per Ross et al. 2008, deciding the right proportion of debt and equity is one of the major concerns for finance personnel, since it is a tradeoff between risks and costs. Therefore, the principal issue in capital structure composition is to find the best proportion between debt and equity. Many extensive studies conducted on capital structure investigates the performance of stock market listed companies to test the extent to which capital structure theories correlate the financing decisions. (Babu and Jain, 1998; Hall et.al., 2000). These studies ignore the peculiarities of private small and medium enterprises (SMEs), which contributes majority of firms in number and account for largest proportion of the GDP and employment in most countries.

Small and Medium Enterprises (SMEs) is an integral part of the Indian industrial sector. The distinctive features of SMEs such as less capital investment and high labor absorption which has created an unparalleled importance to this sector. As per the Development Commissioner of Micro, Small and Medium Enterprises (2011), the sector has the credit of being the second highest in employment, which stands next to agricultural sector. SMEs accounts for about 45 % of the total manufacturing output and 40% of the total exports from the country. It is estimated to employ about 59 million people in over 26 million units throughout the country. There are over 6000 products ranging from traditional to high-tech items, which are being manufactured by the SMEs in India. The nature of the businesses in this sector plays a significant role to alleviate poverty and promote sustainable growth and impartial allocation of income in India. The SMEs play an important role in efficiently distributing the enormous labor supply and scarce capital by implementing labor intensive production processes. SME boosts entrepreneurial skills by promoting private ownerships and their flexibility in responding quickly to changing market demand and supply conditions are remarkable (Sudha and Krishnaveni, 2012). According to Cassar (2004), the capital structure decisions of SMEs have important implications for their performance, their ability to succeed, their risk of failure and their potential for future development. Finding the suitable capital structure for SMEs is vital. A suitable capital structure helps SMEs to stay alive in the competitive market and has a positive effect on the overall functioning. The inability to secure sufficient sources of finance has been previously implicated as the primary cause of SME failure (Van Auken and Neeley, 1996; Coleman, 2000). Understanding how SMEs are financed is therefore an important question.

II. Literature review

Study on capital structure has become one of the most significant subjects of interest in modern finance. It has acquired lot of recognition from researchers during recent years. There exists a vast body of literature that has examined the determinants of the capital structure of companies in developed economies. Empirical works based on theories of capital structure has been previously conducted for Australia (Cassar and Holmes, 2003; Johnsen and McMahon, 2005), Spain (Sorgorb, 2005), UK (Hall et al., 2000) and the US (Gregory et al., 2005). However studies on capital structure have been extended to the developing economy contexts only in recent past. The level of development of a country's legal and financial systems has been shown to influence the capital structure of its enterprises (Fan et al., 2006). In economies with relatively weak investor protection, enterprises are more likely to employ short-term debt than long-term debt in their capital structure. This is in contrast to enterprises in economies with active stock markets and large banking sectors which have more long-term debts (Demirguc-Kunt and Maksimovic (1999).

Despite of the growing volume of literature on the determinants of capital structure in the developing economy context is available, there has been limited work conducted on SMEs in these countries. One possible reason for this discrepancy is that SME data is often scarce and sometimes not reliable, since these firms are not officially required to disclose detailed information or to have their reports audited. Some preliminary work has been carried out for Poland (Klapper et al., 2006), Vietnam (Nguyen and Ramachandran, 2006), and Ghana (Abor and Biekpe, 2007). All these studies implies to the fact that the that theories of capital structure developed to explain the financing decisions of SMEs in developed economies are not equally applicable in developing economies, due to their institutional and organizational differences. Many authors suggested the firm size as a potential determinant of capital structure decision. The transaction costs associated with financing are usually related with size too, which implies higher proportion of transaction costs for smaller firms, reinforced in case of liquidation (Rajan and Zingales, 1995; Kremp et al., 1999; Ozkan, 2001). Even though, the predictable relationship between firm size and capital structure is positive, many studies found a negative relationship when considering only short-term liabilities (Michaela et al., 1999; Fluck et al., 2000). Positive correlations between asset structure and the capital structure was previously reported for several SMEs (Van der Wijst & Thurik, 1993; Jordan et al., 1998; Michaela et al., 1999). The relationship between firm performance as measured by its profitability ratio and capital structure has been evaluated by several investigators. (Sunder and Myers, 1994; Babu and Jain, 1998). In India, capital structure patterns are peculiar to specific industries. They differ from industry to industry but exhibit homogenous pattern in similar industry. Such patterns are similar throughout the world (Singh and Luthra, 2013). As per the recent report of Prime Minister's Task Force on MSMEs (2010), the lack of availability of adequate and timely credits and limited access to equity capital are the most important investment constrains faced by SMEs in India.

III. Objectives of the study

The present paper envisages studying the trend in financing pattern as well as composition of capital structure of SMEs by evaluating the long-term solvency using debt to equity ratio, debt to total fund ratio and interest coverage ratio.

IV. Methodology

The study has been based on secondary data obtained from SMEs. The data drawn from financial statements of the respective companies published in their annual reports have been analyzed, tabulated and interpreted using well established financial tools. The data for a period of 4 years (2010-13) was interpreted through the analysis of capital structure ratios such as debt-equity ratio, debt to total fund ratio and interest coverage ratio. The quantum and structure of total funds in SMEs during the period of study was also analyzed.

V. Results and Discussion

Graphical representation of the quantum and structure of total funds in selected SMEs compiled from the annual reports during the four year period of study is given in fig 1. As can be seen, the long term funds have contributed more than 70% of total funds during 2010, 2011 and 2013. However in 2012, the long term funds acquitted by the SMEs were only 58.41%. The long term funds acquired by the companies include share capital, reserve and surplus as major shareholder's fund and secured and unsecured loans as borrowed funds. A radical increase in the percentage major shareholder's funds was noticed in 2012 and 2013 while the inclusion of borrowed funds decreased considerably. Reserve and surplus had declined in the concluding year of the study which depicts that the funds had been utilized and the firms had reduced its dependency on reserve and surplus for funding. The short term funds include the current liabilities and provisions of the company which accounted for about one-fourth of the total funds acquired in the first two years of study. Conversely, owing to the incorporation of minimal long term funds in the year 2012, the short term funds contributed about 41.68% of the total funds acquired. The debt-equity ratio of the SMEs during the study period is given in table 1. The debt

equity ratio is calculated to measure the relative claims of outsiders and the owners against the firm's assets. The ratio shows the relative proportion of long term debt i.e. borrowed funds and shareholder's equity i.e. net worth. It is evident that long term debt of the SMEs had decreased remarkably from Rs.901.95 lakhs in 2010 to Rs.100 lakhs in 2013. However, the net worth had gradually increased from Rs.808.83 lakhs to Rs.1047.34 lakhs over the study period. The debt equity ratio had declined from 1.11 times in 2010 to 0.09 times in 2013 which is below the generally accepted standard norm of 2:1. This in turn implies that that the firms had employed less of debt. In 2010 debt was more than the net worth but gradually firms reduced debt over equity in 2013. The mean, standard deviation and co-efficient of variation of debt-equity ratio in SMEs are 0.65 times, 0.63 times and 96.05 percent respectively. The coefficient of correlation between debt and equity in SMEs was 0.35 and thereby indicating that debt and equity are positively related.

Fig1: The quantum and structure of total funds in SMEs during 2010 to 2013

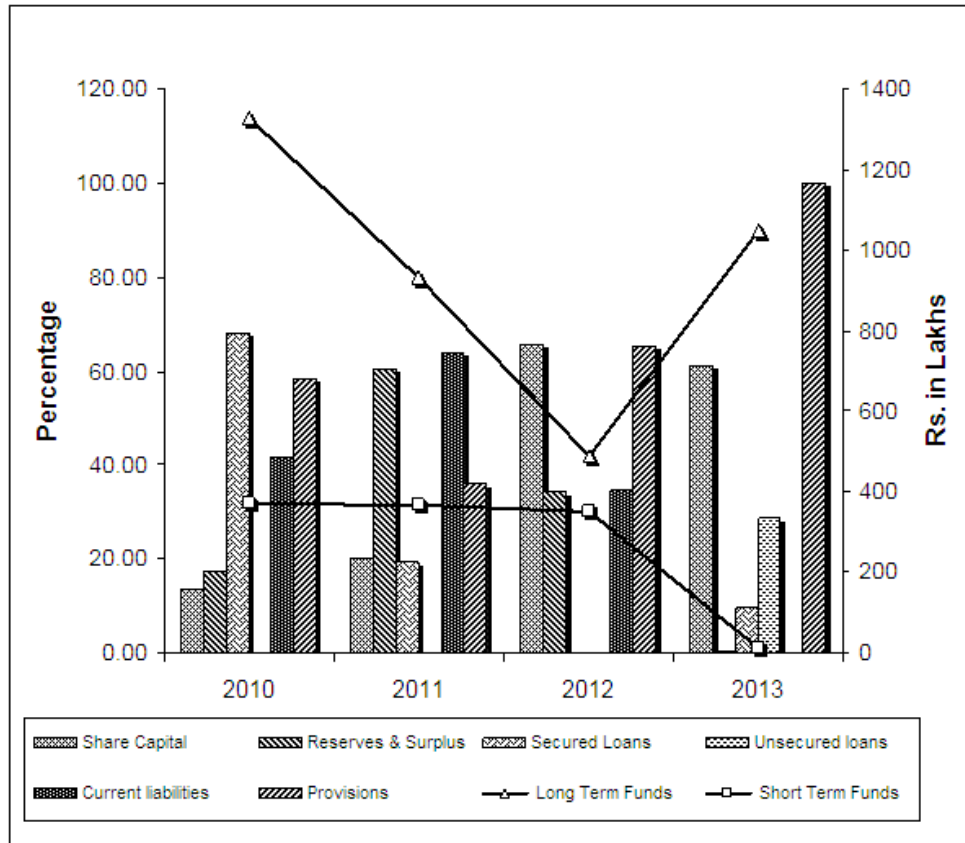


Table 1: The debt-equity ratio of SMEs during 2010 to 2013.

YEAR	Long-term Debt (Rs. in lakhs)	Net worth (Rs. in lakhs)	Debt-equity ratio
2010	901.95	808.83	1.11
2011	182.03	142.53	1.27
2012	33.80	257.94	0.13
2013	100.00	1047.34	0.09
Mean	304.44	564.16	0.65
SD	402.92	433.83	0.63
C.V. (%)	132.35	76.89	96.05
Co-efficient of correlation between debt and equity (r) =0.35			

The proportion of the debt in the financial structure was analyzed by the calculation of debt to total fund ratio by dividing total debt with total funds employed. The total debts involves long term funds and long term debts i.e. borrowed funds and total funds includes shareholders' funds and long term funds. The results are given in table 2. Total funds of the SMEs had increased from Rs.172.61 lakhs in 2010 to Rs.1117.34 lakhs in 2013, while the total debt declined from Rs. 917.27 to Rs. 170 lakhs during the study period. Consequently, the debt to total fund ratio had declined from 5.31 in 2010 to 0.15 in 2013 which is less than 50% which shows the claim of creditors is less than owners (shareholders). A high level of debt brings inflexibility in the business operations due to increasing interference and pressures from the creditors. The mean, standard deviation and co-

efficient of variation of debt to total fund ratio in SMEs are 1.80 times, 2.38 times and 132.60 percent respectively. Coefficient of correlation of debt to total fund was inversely related (-0.54) i.e. total debt is negatively correlated to total funds which exemplifies that the variables are independent to each other.

Table 2: The debt to total fund ratio of SMEs during 2010 to 2013.

YEAR	Total Debt (Rs. in lakhs)	Total Fund (Rs. In lakhs)	Debt to total fund ratio
2010	917.27	172.61	5.31
2011	184.72	327.25	0.56
2012	297.22	257.93	1.15
2013	170	1117.34	0.15
Mean	393.30	468.79	1.80
SD	354.56	423.54	2.38
C.V. (%)	90.15	93.21	132.60
Co-efficient of Correlation of total debt and total fund (r) = -0.54			

Table 3 represents the interest coverage ratio which is used to test the firm's debt-servicing capacity. It indicates the number of times interest is covered by the profits available to pay the interest charges. The earnings before interest and taxes (EBIT) had increased from Rs.360.96 lakhs to Rs.3743.37 lakhs and interest charges had declined from Rs.994.53 lakhs to Rs.660.00 lakhs over the study period. The highest interest coverage ratio was recorded at 5.67 times in 2013 and the lowest being 0.36 times in 2010. The mean, standard deviation and co-efficient of variation of interest coverage ratio in SME are 2.61 times, 2.71 times and 103.82 percent respectively. A higher interest coverage ratio implies that the long terms credits are secured and there exists adequate earnings to meet the commitments of fixed interest charges. The use of debt in any business undertaking is justified, provided the coverage for fixed interest charges are adequate.

Table 3: The interest coverage ratio of SMEs during 2010 to 2013

YEAR	EBIT (Rs. in lakhs)	Interest (Rs. In lakhs)	Interest coverage ratio
2010	360.96	994.53	0.36
2011	676.52	164.91	4.10
2012	127.50	429.48	0.30
2013	3743.37	660.00	5.67
Mean	1227.08	562.23	2.61
SD	1692.54	352.10	2.71
C.V. (%)	72.50	159.68	103.82

VI. Conclusion

Results of the present empirical study revealed that long term funds had apportioned nearly two-third of total funds when compared to short term funds in the SMEs selected for the study. The firms had utilized more owned funds than borrowed funds. The SMEs had shown an inclination in strengthening long term funds consisting of both shareholders funds as well as long term borrowed funds in order to finance its assets requirement. The financial risk of the firms is comparatively low since it mostly depended on equity financing. The mobilization of the debt funds by the company means that it could raise the external funds to bring the optimum capital structure i.e. minimize the cost of capital and maximize the share value of the firm. This may be due to the tax deductibility of the interest paid on debt. Thus the benefits of financial leverage can be reaped for improving the financial performance of the firm. The behavior of the interest coverage ratio was unpredictable. The interest charges are fully covered by the earnings before interest and taxes. A higher interest coverage ratio is desirable, but too high ratio indicates that the firm is very conservative in using debt, and it is not using debt to the best advantage of the shareholders. Hence, it is suggested that SMEs shall tap the debt funds optimal to maintain a balanced capital structure. The financial performance of a firm is greatly influenced by its capital structure. An optimal capital structure maximizes the shareholder's wealth with best combination of debt and equity mix thereby minimizing the cost of capital.

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