CHAPTER – 7

CONCLUSION AND SUGGESTION

The analysis and the interpretations have disclosed the following facts about the effectiveness of the performance of SMEs across manufacturing sector and Service sector in Maharashtra. It is arranged in the logical order. They help to identify the strength and weakness of the selected SMEs.

7.1 FINDINGS ON THE TREND OF APPLICATION AND SOURCES OF FUND

- Shareholders fund and reserves and surplus of SMEs in both the sector i.e manufacturing and services depicts the increasing trend .This is sign of growth and more investment in the business. Reserves help in strengthening the financial position of the enterprise, since it can be used to meet any unforeseen losses that may arise in future.
- In manufacturing sector, Borrowed funds also reveals increasing trend .Filtra consultant and engineers ltd and Valiant organic ltd are debt free units. The choice most often depends upon which source of funding is most easily accessible for the SME, its cash flow and how important maintaining control of the business is in hands of principal owner.

In service sector, Jupitor Info Media ltd shows no borrowed funds .In other units also long term borrowed fund follows the stable trend .It can be concluded that long term borrowed funds play insignificant role in SMEs ,this can be due to lack of access to bank loan or problems of paper work while taking long term finance.

• Current liabilities display the increasing and volatile trend .The major component of current liabilities are short term funds and trade payable. There is volatility in trade payable, this can be due to cyclical, seasonal business and customised business of

SMEs. As majorly SMEs have customised products depending upon the requirement of large companies and it play major role of subsidiary to large companies .As they have Business to business product rather than business to customer product. It can also be concluded that SMEs rely more on short term funds than long term funds.

- The major rise on the liabilities side is due to the increase in the reserves and current liabilities. The maximum rise on the asset side is due to the increase in inventories, sundry debtors, cash in hand.
- Capital employed of SMEs in both the sector shows the increasing trend; this is majorly due to increase of reserves and surplus and due to increase in current assets over the study period.
- Fixed asset are increasing over the study period both in Manufacturing and Service sector SMEs. The average Fixed asset of manufacturing sector is higher than the service sector over the study period.
- The co-efficient of variance shows huge volatility in the current assets of selected companies in Manufacturing and service sector. This is mainly due to fluctuation in debtors and cash of units over the study period. The cash balance in a company rises and falls based on inflows and outflows of operational cash and financing activities. Manufacturing SMEs have higher investment in operations compare to service sector in SMEs .The major reason is due to higher investment is required in inventories where in service sector doesn't need higher amount of funds invested in stock.
- The main reason of increasing the investments in liquid assets is due to increasing debtors over the period of study. In a way debtors have increased due to increase in turnover.
- Working capital of selected SMEs shows very high fluctuation. The standard deviation and co-efficient of variation indicates that there was a lack of uniformity and consistency in working capital.
- Revenue from operations shows a drastic change in the last two years of the period of study. It is evident from the standard deviation figures that the sample companies are

not earning uniformly. Revenue from operation of SMEs in manufacturing sector and service sector displays the overall growth.

• Preference share capital is not popular as a source of finance in the selected sample units.

7.2 FINDINGS ON PERFORMANCE OF SOLVENCY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

• **Fixed assets to long term funds** Analysis of the overall position of the fixed assets to long term funds ratio reveals investment in the sample units shows that the size of investments improved considerably during the period of study. Plant and machinery formed the dominant item of fixed assets in all sample SMEs of Manufacturing sector. Only Bajaj health care ltd has an average fixed asset ratio greater than one which depicts operational inefficiency. This is because the fixed assets are financed by short term borrowings. It is also found that Long term funds are used for operational capital.

Kruskal wallis test Table 6.8.1 A) and 6.9.1 A) concludes there exist significant difference across SMEs within Manufacturing sector and service sector of Maharashtra.

t test table 6.11 reveals that average Fixed asset to long term funds ratio of SMEs of Manufacturing and Service sector are alike.

Regression analysis table 6.13.2 A) also predicts that Fixed asset to long term funds of service sector impacts on return on capital employed .

• Long term Debt to Asset Ratio- Almost all the SMEs use equity in financing their assets. Most of the companies use more equity in proportion to their debt. Service sector SMEs do not use long term debt may be due to inability to access finance through loan which is reflected in their low growth of revenue from operation.

Kruskal Wallis test Table 6.8.1B) and 6.9.1 B) concludes this ratio varies across both manufacturing sector and service sector.

t test table 6.11 reveals that concludes long term debt to asset ratio in manufacturing sector significantly differ from service sector. SMEs of Service sector have lower debt comparing to manufacturing sector.

Regression analysis table **6.13.1** A)concludes long term debt to asset ratio negatively impacts the return on capital employed.

• **Degree of Financial Leverage**- In manufacturing sector, Bajaj health care ltd is lower than 1 as it indicates risk averse unit. Patdiam jewellwry ltd has Financial leverage ratio more than 2 ,it is challenging.

In service sector, DRA consultant pvt ltd ,Comfort commotrade ltd ,Cawasji Behramji Catering services ltd, Creative Peripherals and Distribution ltd has less than 1 Financial average Ratio. These SMEs are highly risk averse and not taking up projects, which could add value to the business.

Kruskal Wallis test Table 6.8.1C) and 6.9.1 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average financial leverage is similar across SMEs of both manufacturing and service sector.

Regression analysis table 6.13.1 A), 6.13.2 A)concludes leverage ratio negatively impacts the return on capital employed. To improve the return on capital employed SMEs should increase the earnings before interest and tax .

7.3 FINDINGS ON PERFORMANCE OF LIQUIDITY MANAGEMENT OF **SELECTED** THE **SMES** OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

• **Current Ratio** -In manufacturing and service sector of SMEs ,all units displays the SMEs have sound liquidity position in short term during the study period. There was a fluctuating trend in the current ratio, over the study period due to the locking up of

current assets and a little settlement of current liabilities from 2010 to 2015 in both manufacturing and service sector of SMEs. Under modern financial management, increasing current assets contributes to 'necessary evils'. Higher current asset contributes only negatively to the profitability of a business. Ganga pharmaceutical ltd has 2.54 times, Valiant organic ltd current ratio of 2.17 times, this is sign of mismanagement of current assets. In service sector, Comfort Commotrade ltd and Jupitor info media ltd also reflects increasing trend. It is also found that the current ratio of all the selected automobile companies marked in fluctuating trend. This situation indicates the inconsistence performance as well as no fix policy regarding current assets.

Kruskal Wallis test Table 6.8.2 A) and 6.9.2 A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector.

Regression analysis table 6.13.1 B) and 6.13.2 B)concludes current ratio has least direct impact on the return on capital employed.

• Quick ratio -There was a decrease in the liquid ratio due to the lack of overdrafts and the heavy increase of other components. It is assumed that the current liabilities are equal to the liquid liabilities as there were no overdrafts during the study period. Manufacturing sector SMEs have lower quick ratio compare to service sector as the major issue

Kruskal Wallis test Table 6.8.2 B) and 6.9.2 B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector. Regression analysis table 6.13.1 B) and 6.13.2 B) concludes Quick ratio has least direct impact on the return on capital employed.

• Cash to Current Asset ratio- The average of Manufacturing sector broadly lies within the range of 6 percent to 10 percent wherein the service sector within 17 percent to 29 percent. Manufacturing sector SMEs follow too much conservative policy in case of liquidity.

Kruskal Wallis test Table 6.8.2 C) and 6.9.2 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average cash to current asset ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector.

Regression analysis table 6.13.1 B) and 6.13.2 B)concludes that in Manufacturing sector Cash to current asset ratio has direct positive impact on the return on capital employed in Manufacturing sector.

• Current Assets to Total Assets Ratio-This ratio in Manufacturing and service sector of SMEs shows decreasing trend which reflects better management of working capital. But still overall ratio in each case is more than 50 percent of total asset. The main reason, in such a case, may be heavy investment in inventory due to lacks of scientific inventory management, bigger size of accounts receivable due to liberal credit policy, idle amount of cash due to inefficient cash management.

Kruskal Wallis test Table 6.8.2 D) and 6.9.2 D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher investment in inventory in manufacturing sector. Regression analysis table 6.13.1 B) and 6.13.2 B) concludes that in Service sector current asset to total asset ratio has direct positive impact on the return on capital employed in Manufacturing sector.

• Liquid asset to current asset ratio- Liquid asset to current asset is in the range of 89 percent to 92 percent in Service sector in Maharashtra during 2010-2011 to 2014-2015. In manufacturing sector, the range is between 89 percent to 92 percent during 2010-2011 to 2014-2015.

Kruskal Wallis test Table 6.8.2 E) and 6.9.2 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average current ratio is significantly different across SMEs of both manufacturing and service sector. This is majorly due to higher liquidity in Manufacturing than service.

Regression analysis table 6.13.1 B) and 6.13.2 B)concludes that in both Manufacturing and Service sector Liquid asset to current asset ratio have least impact on the return on capital employed.

7.4 FINDINGS ON PERFORMANCE OF WORKING CAPITAL MANAGEMENT OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

Working Capital Turnover ratio-Working capital trend Fluctuating and displays the lack of consistency, this is majorly due to fluctuating working capital. This ratio shows the alarming situation of SMEs as Working capital turnover ratio is decreasing over the study period. Few SMEs also have negative working capital which means their short-term debts outweigh their liquid assets.

Kruskal Wallis test Table 6.8.3 A) and 6.9.3 A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Working capital turnover ratio is across SMEs of both manufacturing and service sector is similar. Both the sectors face the similar issues in case of working capital compare to sales which is low .

Regression analysis table 6.13.1 C) and 6.13.2 C)concludes that in both Manufacturing capital turnover ratio has direct positive impact. Hence to increase the Return on capital employed turnover ratio must be improved.

• Sales to Current asset ratio-In case of Manufacturing sector, SMEs displays the growing trend .In case of service sector, sales to current asset displays the lack of consistency.

Kruskal Wallis test Table 6.8.3 B) and 6.9.3 B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Sales to current asset ratio is across SMEs of both manufacturing and service sector is similar.

Regression analysis table 6.13.1 C) and 6.13.2 C)concludes that in Manufacturing Sales to current asset ratio has direct positive impact. Hence to increase the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.

• **Debtors turnover ratio** Debtors are the largest part of current asset of SMEs in both the sectors in Maharashtra, It is next to cash and bank balances. In case of Manufacturing sector all selected SMEs reveal increasing trend which is positive sign. It shows that increasing debtors are matching with sales of unit and careful credit policies are framed. It is observed that though the sales and debtors increased simultaneously, the rate of increase was more in the latter than the former during the first part of the period study. As a result the rate of Debtor turnover declined and the collection period increased.

In service sector, Cawasji Behramji catering service ltd. and Mitcon Consultancy & engineering service ltd displays decreasing trend of Debtors Turnover Ratio ,this is possible in small sale base unit comprising of only a few large customers, often suffer from low debtors turnover ratio. As large customers are not prompt to pay up ,by virtue of their command over suppliers, they can afford to delay payments and enjoy implicit free financing of their inventory.

Kruskal Wallis test Table 6.8.3 C) and 6.9.3 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

- t test table 6.11 reveals that concludes average Sales to current asset ratio is similar across SMEs of both manufacturing and service sector.
- Regression analysis table 6.13.1 C) and 6.13.2 C)concludes that in Manufacturing Debtors turnover ratio has negative impact. Hence to increase the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.
- Credit strength ratio-"A credit strength ratio between 1.75 to 2.0 provides a reasonable cover and control against undue expansion of short term credit without making the firm too conservative."¹¹³In case of Manufacturing sector and service sector, All selected SMEs are within the range of 1.75 to 2.0 except in Bajaj health care ltd, the average ratio is 2.67,Cawasji Behramji & engineering service ltd is 3.15,Creative Peripherals & Distribution ltd is 2.86, this indicates a higher than desirable dependence on current liabilities ,which may turn out to be dangerous it the company does not have enough asset margins to fall back on .

Kruskal Wallis test Table 6.8.3 D) and 6.9.3 D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

- t test table 6.11 reveals that concludes average Credit strength ratio is similar across SMEs of both manufacturing and service sector
- Regression analysis table 6.13.1 C) and 6.13.2 C)concludes that in both Manufacturing and service sector credit strength ratio has impact. Hence to increase

the Return on capital employed in manufacturing sector sales to current asset ratio must be improved.

• Interest coverage ratio-"A very low Interest coverage ratio i.e less than 2,may indicate a risk prone management with highly geared capital structure or it simply means that loan funds are not paying their way" In case of Manufacturing sector, Baja healthcare ltd and Patdiam jewellery ltd has low ratio during study period. In case of Service sector, only Creative Peripherals and Distribution ltd has low ratio 1.69 times. High ratio reveals risk averse management .In case of Manufacturing sector has 21 times ratio .In case service sector, DRA consultancy ltd 43.76 times , Comfort common Trade ltd has 1168 times ratio, Mitcon Consultancy & Engineering services ltd has 167 times which shows the SME uses free market credit than interest bearing loans.

7.5 FINDINGS ON PERFORMANCE OF PROFITABILITY OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

• Net Profit Ratio -Operating margin is used to measure company's pricing strategy and operating efficiency. It gives an idea of how much a company makes (before interest and taxes) on each rupees of sales. The range between service sector SMEs and manufacturing sector is approximately a similar trend 16% to 24%.

Kruskal Wallis test Table 6.8.4 A) and 6.9.4 A) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Net profit ratio is similar across SMEs of both manufacturing and service sector

• **Return on Capital employed** -Return on Capital employed of SMEs in Manufacturing Sector is in the range of 21 percent to 31.4 percent .SMEs in service

sector is in the range of 23 percent to 33.71 percent. Overall SMEs shows erratic and negative trend. Few SMEs also reveal reveals decreasing profits the reason can be In recent years the decline in EBIT was more than the decline in assets, This indicates these units has not been designing its investment policy depending upon its capacity to earn profits.

Kruskal Wallis test Table 6.8.4 B) and 6.9.4 B) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Return on capital employed ratio lies in the similar range across SMEs of both manufacturing and service sector

• Net profit to total asset ratio-The return on asset analysis conducted in the study reveals that Manufacturing sector SMEs have shown the Downbeat tendency during 2013-2014 and then has shown the positive trend in the performance of profitability ratios during 2014-15 .Service sector SMEs shows the negative trend which is the area of concern and increase of sales or effective utilisation of asset plans should be implemented in few SMEs in service sector.

Kruskal Wallis test Table 6.8.4 C) and 6.9.4 C) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average net profit to total asset ratio lies in the similar range across SMEs of both manufacturing and service sector.

• **Return on net worth** indicates how well the company has used the resources of the owners. On making an analysis of the performance of the selected SMEs the return on net worth marked in fluctuating trend during the period of study. Return on net worth of SMEs are fluctuating .as the average ratio is more than minimum 27.54 percent in service sector and 32.45 percent in Manufacturing sector .this indicates the SMEs have good opportunity of growth .

Kruskal Wallis test Table 6.8.4 D) and 6.9.4 D) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes average Return on Net worth ratio is varying across SMEs of both manufacturing and service sector .

 Return on Capital employed - Overall SMEs have decreasing and erratic trend of Return on Capital employed over the study period. Return on capital employed ratio measures the profitability of a company by expressing its operating profit as a percentage of its Net worth . From the analysis it is to be found that return on Net worth below than 50% in all the selected SMEs. It suggests inability to earn reasonable profits. However, no standard norm for this ratio is suggested. Accordingly, all the selected SMEs should try to maintain this ratio up to 50% because its point to well-organized use of funds. This reflects that the size of sales is not justifying the size of investment by shareholders.

Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Return on Capital employed ratio lies in the similar range across SMEs of both manufacturing and service sector.

7.6 FINDINGS ON PERFORMANCE OF CAPITAL STRUCTURE OF THE SELECTED SMES OF MANUFACTURING AND SERVICE SECTOR IN MAHARASHTRA

Debt equity ratio "In India, The average debt equity ratio across industry was to be • found between 1.5 to 2 ."(Madan ,1978)¹¹⁴ The debt-equity ratio on an average was higher than the generally accepted standard norm of 1:1 in five out of the selected sample units. It may be inferred that the units have preferred to use more short-term loans and advances to meet their current obligations year after year. Since the trend of the debt-equity ratio registered a decline, it may be said that an increasing proportion of debt was employed every year. However increasing employment of loans did not maximise the earnings to equity shareholders which is evident from the interestcoverage ratio. In other words, SMEs were trying to increase the profits with the use of less cost of source of funds. In other words, the industry did not follow a uniform policy of raising funds from borrowing and net worth. In the same way, the debt equity ratio was not consistent due to changes in the debt and equity capital proportions. From the creditor's point of view, the long-term financial strength was poor. Service sector in SMEs more dependent on own funds than borrowed funds, service sector is between 0.55 to 0.79 and manufacturing sector is between 0.65to 0.82 .The ability to pay off its fixed interest commitments was very sound.

Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Return on Debt to equity ratio lies in the similar range across SMEs of both manufacturing and service sector.

• Total debt to Equity ratio is much higher than long term debt equity ratio, this indicates reliance of SMEs on short term financing. long term financing can also provide SMEs with tax shield.

Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Total Debt to Equity ratio reveals the difference across SMEs of both manufacturing and service sector.

• Total Debt to Total asset-This ratio indicates that overall SMEs of manufacturing and service sector finance total assets mainly through their own funds. This can be due to less financing option or lack of awareness regarding the various options of expanding their business. There can be more reason of low market share.

Kruskal Wallis test Table 6.8.4 E) and 6.9.4 E) concludes this ratio varies among the SMEs of both manufacturing and service sector. There is higher standard deviation of mean.

t test table 6.11 reveals that concludes Total debt to Total Asset ratio reveals the difference SMEs of both manufacturing and service sector.

• **Fixed assets utilisation Index** –"This index should be more than one indicates company utilising it fixed assets efficiently."¹¹⁵ All selected sample manufacturing SMEs reflects effective utilisation as it is higher than 1.In services sector, Only Suyog Telematics ltd and Jupitor info Media ltd which shows the average fixed asset index 0.76 and 0.61 respectively. This is due to both the SMEs have invested in fixed asset exorbitantly compare to sales.

7.7 SPRINGATE MODEL

As can be seen from the 6.7 A) and 6.7 B) table five companies out of the 12 selected companies seem to be heading towards bankruptcy. These have been highlighted in red. The Z score of these companies is less than 0.862 in four years or more. As a result even the average Z score is less than 0.862.

The companies heading towards bankruptcy are as follows :

- Bajaj Healthcare Ltd
- Ganga pharmaceuticals ltd

- Suyog Telematics ltd
- Comfort Commotrade ltd
- Jupiter info media ltd

Out of these, Bajaj healthcare and Suyog telematics are Medium companies, whereas the other four are small companies.

Analysis of the reasons

The reasons behind the Z score are as follows

- In case of Bajaj healthcare, the major reason is that they have a negative working capital. Due to high current liabilities and negative working capital both x1 (working capital/total assets) and x3 (PBIT/ Current liabilities) have a negative and low value respectively which has brought down the Z score. However the last year under study i.e. 2014-15 the score has increased. The average Z score is above 0.7 hence it appears the company has improved and since it is already quite profitable, Bajaj healthcare may be considered quite solvent in long term.
- In case of Suyog telematics, the working capital is negative in 3 out of 5 years, thus causing a decline in x1 (working capital/total assets)variable. Further the x4 variable (sales/ total assets) is also quite low i.e. 0.5, because of which the Z score has declined. However the same has picked up in the last year 2014-15 which has brought the average Z score to more than 0.7. It may therefore be concluded that Suyog Telematics also seems to be out of the danger of insolvency.
- Ganga pharmaceuticals Ltd has low working capital, earned very less profits and also a very low turnover. As a result their Z score is less than the threshold in all the five years. The x2 (PBIT/Total assets)variable , which is the return on total assets is less than 1% due to very low profits. Similarly the x3 variable - EBIT/CL is also less than 5%. The Sales / TA is around 0.5 which is quite low causing a decrease in x4(Sales/ Total assets). The overall Z score is 0.49 and therefore the company is definitely moving towards bankruptcy, unless something is desperately done to improve profitability and sales.

- In case of Jupiter Infomedia Ltd., the working capital is very low and negative in the last two years ie. The current liabilities are more than the current assets. Moreover, the return on total assets is around 1.5% only due to very low profits consistently in the last 4 years which brings down the x2(PBIT/Total assets)variable also. The sales turnover ratio x4 (Sales/ Total assets) is also too low which is 0.1 (less than 10% of total assets). As a result of this the Z score is less than the threshold for the last 4 years and the average Z score is 0.56. It has a potential of being insolvency firm.
- In case of comfort Commotrade ltd ,has low profit in the year 2012-13 and 2013-14 .Sales turnover Ratio is low in both the years i.e 12 percent of total asset and 19 percent of total asset which is very low .

Thus out of the twelve companies under study, three of the companies are likely to be bankrupt. The four companies are:

- 1. Ganga pharmaceuticals
- 2. Jupiter Infomedia Ltd
- 3. comfort Commotrade ltd

The above three SMEs are small companies i.e. having a total capital employed of less than 10 crore. Thus it may be concluded that SMEs with lower capital employed are more susceptible to becoming insolvent as they seem to have lesser strength to withstand competition and economic downturns.

7.8 OVERALL AVERAGE FINDING AMONG FINANCIAL PARAMETERS

As per the table 6.10 using t test concludes that there exists a real difference in average of Solvency, Liquidity, and Working capital across service sector and Manufacturing sector. On the other side Parameters viz. Profitability, capital structure are similar across service sector and Manufacturing sector. Manufacturing SMEs are better in liquidity and solvency as these units have back up of fixed asset investment and have higher long term investments compared to service sector.

7.9 OVERALL COMMENTS ON CORRELATION ANALYSIS AND TESTING OF HYPOTHESIS

SMEs in Manufacturing sector

As regards the correlation between the Solvency and Profitability (ROCE), we find that there is no significant positive relation between Fixed asset to long term funds Ratio and return on capital employed and between Degree of financial leverages and return on total assets at 5% level of significance with 25 degree of freedom. There is a significant positive relation between Long term debt to total asset ratio and return on capital employed .This implies that improvement in Long term debt to total asset ratio at the present level will significantly improve return on capital employed i.e. profitability. However, Fixed asset to long term funds Ratio and Degree of financial leverages does not have any such impact on profitability.

As regards the correlation between the Liquidity and Profitability (ROCE), we find that there is no significant positive relation between current ratio and return on total assets, between quick ratio and return on total assets and current asset to total asset Ratio at 5% level of significance with 25 degree of freedom. There is a significant positive relation Cash to current asset ratio and return on capital employed and Liquid asset to current asset Ratio to return on capital employed. This implies that improvement in Cash to current asset ratio and Liquid asset to current asset Ratio at the present level will significantly improve return on total assets i.e. profitability. However Current ratio, quick ratio (i.e. cash and bank balance here), current asset to total asset Ratio does not have any such impact on profitability.

As regards the correlation between the Working Capital ratioand Profitability (ROCE), we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the working capital ratios, i.e. Working capital turnover Ratio, Credit strength ratio are not correlated to the profitability (ROCE).Hence, Sales to current Asset ratio to (ROCE) and Debtors turnover ratioto (ROCE) have slight positive relation with Return on capital employed. We can conclude that these ratio have relation between Working capital and profitability at 5% level of significance with 25 degree of freedom.

As regards the correlation between the Capital Structure and Profitability (ROCE), we find that though there is a negative relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the capital structure ratios, i.e. Debt equity ratio, Total Debt to asset Ratio, are negatively correlated to the profitability (ROCE). Proprietary Ratio has no significant relation with profitability. Hence, we can conclude that there is relation between capital structure and profitability at 5% level of significance with 8 degree of freedom.

SMEs in service sector

As regards the correlation between the Solvency and Profitability (ROCE) of SMEs of service sector in Maharashtra., we find that there is no significant positive relation between Fixed asset to long term funds Ratio and return on capital employed, Long term debt to total asset ratio and return on capital employed and between Degree of financial leverages and return on total assets at 5% level of significance with 25 degree of freedom. This implies that improvement in Long term debt to total asset ratio, Fixed asset to long term funds Ratio, Degree of financial leverages at the present level will significantly not improve return on capital employed i.e. profitability.

As regards the correlation between the Liquidity and Profitability (ROCE) of SMEs of service sector in Maharashtra. We find that there is no significant positive relation between current ratio and return on total assets, between quick ratio and return on total assets and current asset to total asset Ratio at 5% level of significance with 25 degree of freedom. There

is a significant positive relation Quick ratio and return on capital employed and cash to current asset Ratio to return on capital employed. This implies that improvement in quick ratio and cash to current asset Ratio at the present level will significantly improve return on total assets i.e. profitability. However Current ratio, cash to current asset (i.e. cash and bank balance here), cash to total asset Ratio does not have any such impact on profitability.

As regards the correlation between the Working Capital ratio and Profitability (ROCE) of SMEs of service sector in Maharashtra., we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the working capital ratios, i.e. Working capital turnover Ratio, sales to Current asset Ratio, Debtors turnover ratio are not correlated to the profitability (ROCE).Hence, Credit strength ratio to (ROCE) have strong positive relation with Return on capital employed. We can conclude that these ratio have relation between Working capital and profitability at 5% level of significance with 25 degree of freedom.

As regards the correlation between the Capital Structure and Profitability (ROCE) of SMEs of service sector in Maharashtra, we find that though there is a positive relation, no such relation is significant at 5% level of significance with 25 degree of freedom. We observe that though all the capital structure ratios, i.e. Debt to equity ratio, Proprietary ratio, Total Debt to asset ratio are slightly correlated to the profitability (ROCE), not a single relation turned out to be statistically significant. Hence, we can conclude that there is a relation between capital structure and profitability at 5% level of significance with 8 degree of freedom.

7.10 REGRESSION ANALYSIS OF FINANCIAL PARAMETERS AND PROFITABILITY (RETURN ON CAPITAL EMPLOYED)

SMEs of Manufacturing sector in Maharashtra

Regression analysis of Solvency and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No 6.13.1 A)it is concluded that Long term debt to asset ratio and Financial leverage ratio is negatively related with Return on capital employed. If these two ratios are decreased return on capital employed can be increased in Manufacturing sector.

Regression analysis of Liquidity and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 B) it is concluded that Cash to Current Asset ratio is positively related with Return on capital employed. If Cash to Current Asset ratio is increased return on capital employed can be increased in Manufacturing sector.

Regression analysis of working capital analysis and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 C) it is concluded that Working Capital Turnover ratio, Sales to Current asset ratio, Debtors Turnover Ratio and Credit Strength ratio are positively related with Return on capital employed.

If ratios viz. Working Capital Turnover ratio, Sales to Current asset ratio andCredit Strength ratio are increased return on capital employed can be increased in Manufacturing sector.

Regression analysis of Capital structure analysis and ROCE of Manufacturing sector in Maharashtra.

With reference to Table No6.13.1 D) it is concluded that Proprietary Ratio is positively related with Return on capital employed. If Proprietary Ratio is increased return on capital employed can be increased in Manufacturing sector.

SMEs of Service sector in Maharashtra

Regression analysis of Solvency and ROCE of Service sector in Maharashtra.

With reference to Table No 6.13.2 A)it is concluded that Fixed Asset to long term funds Ratio is positively related with ROCE and Financial leverage ratio is negatively related with Return on capital employed. If these Financial leverage ratio is decreased return on capital employed can be increased in Service sector. In order to increase return on Capital Employed Fixed Asset to long term funds Ratio should be increased.

Regression analysis of Liquidity and ROCE of Service sector in Maharashtra.

With reference to Table No 6.13.2 B)it is concluded that Current Asset to Total Asset Ratio is positively related with Return on capital employed. If Current Asset to Total Asset Ratio is increased return on capital employed can be increased in Service sector.

Regression analysis of working capital analysis and ROCE of Service Sector in Maharashtra.

With reference to Table No 6.13.2 C)it is concluded that Credit Strength ratio is positively related with Return on capital employed. If ratio Credit Strength ratio is increased return on capital employed can be increased in service sector.

Regression analysis of Capital structure analysis and ROCE of Service sector in Maharashtra.

With reference to Table No6.13.2 D)it is concluded that Proprietary Ratio is positively related with Return on capital employed. If Proprietary Ratio is increased return on capital employed can be increased in Service sector.

7.11 SUGGESTIONS

- The increasing trend of short-term funds is a matter of concern for all the sample units. The short-term creditors gradually acquired to more or less a permanent stake in all the units. Hence it is suggested to evade the use of short term credit for capital expenditure like capitalising fixed asset.
- SMEs are required to focus on smooth flow **cash** as idle cash and bank balance will lead to excess liquidity but further it is important to have flow of cash .A high current ratio may be due to improper management of current assets hence SMEs should try to manage its current asset i.e inventory and debtors.
- SMEs have fewer large companies as their customer as a virtue of their command over suppliers, they don't pay on time or delay payment. The range of net profit ratio among service sector SMEs and manufacturing sector is approximately a similar trend of 16% to 24%. The net profit margin in the sample units was meagre. Hence it is advisable to broader sales base.
- Service sector SMEs do not have long term debt which as ideal management it is good but with the practically even with strong visibility of growth, the company's low leverage could put it at a distinct disadvantage to its competitors, which utilise debt for furthering development.
- SMEs reflect high investment in current assets ,which may cause a 'Diversion 'of funds to non value added assets with its consequential negative impact on profitability. It is indispensable for SMEs to keep the adequate working capital management policy on top most ladder to achieve the success. SMES also face the low working capital turnover which is alarming situation for SMEs.
- Working capital should be financed mainly through short term funds .As SMEs tend to use long term funds for operational purpose which is sign of financial inefficiency. This can be due to lack of scientific inventory management, bigger size of accounts receivable due to liberal credit policy, idle amount of cash due to inefficient cash management.

- SMEs with lower capital employed are more susceptible to becoming insolvent as they seem to have lesser strength to withstand competition and economic downturns. Hence SMEs must enhance capital employed in longer run.
- Fixed Asset index depicts SMEs are efficiently utilising the fixed assets.
- SMEs should use optimum policy of financing .It should have balanced use of various options available for finance
- SMEs in both the sector follows the conservative policy regarding capital structure decision, this may be due to lack of credit worthiness with lending institution. SMEs have unutilised debt service capacity hence SMEs can change its debt equity ratio which apparently increase profit. SMEs should explore the possibility of obtaining finance being made available by various Government schemes encouraging technological development.
- SMEs should improve its Financial leverage ratio, SMEs can utilise its debt fund for expansion, can move towards risk taking attitude to earn higher profits.
- SMES average short term debt equity ratio is high, signifying on short term credit is used for financing. SMEs must plan long term plans for financing its fixed asset and apparently this will give avenue for expansion.
- SMEs reveal erratic and fluctuating return on capital employed ratio, this is sign of inefficient investment policies compare to the earnings of the business.
- Net profit on total asset ratio is erratic and low which is the concern factor .In total assets highest share is of debtors and idle cash .Managing the assets can improve this ratio.
- All the selected companies should try to maintain financial ratios at adequate level.
- Further, both the sectors are suggested to focus on receivables management either by reducing its proportion in current asset structure or by enhancing the efficiency through prompt collection efforts and restricted credit policy. The credit and collection policy of the business required be monitored continuously. The remaining

companies may adopt proper receivable control technique to improve the receivable management.

- The quantum of sales generated should be improved impressively in order to enjoy better per of the assets and capital employed.
- Further firms in SMEs are suggested to rely more on long term funds as compared to Current liabilities for financing their Current assets for improving earnings. The selected SMEs should try to match the amount of working with the sales trends. Where there is a deficit of working capital, they should try to build on adequate amount of working capital. Where, there is an excessive working capital, it should be invested either in trade securities or should be used to repay borrowings.
- Research & Development is an empirical means to achieve all the goals for a SME. They have internalized innovativeness and adaptability owing to their dynamic nature and agility to survive despite several challenges. If SMEs were to combine these attributes with action oriented Research & Development programs and government support, the rewarding outcome would certainly contribute to India's economy.
- It was indicated that few SMEs are found to be sick as their z score is less than 0.86 for most of the years during study. Hence the SMEs are suggested to have better working capital, reserves and surplus, Earning before interest and Tax and sales in relation to asset. Further SMEs are suggested to restructure capital structure to revamp the financial position internally.

To conclude the study it may be said that the adoption of the above measures will undoubtedly help the selected units to improve their overall performance. Short term and Long Term solvency position to be maintained properly which will ultimately enhance the liquidity and profitability of the selected companies. The SMEs will be able to generate funds from internal sources, thus breaking the various circles of financial stringencies. It is known that the maximum utilization of fixed assets as well as current assets will result in better financial performance. Hence, all the selected SMEs can follow the suggested makeover to improve their financial position and performance. Hence, with the efficient financial management ,the technological development and investment in research and development can accelerate the growth of SMEs of Maharashtra Thus, the dream of our planners to accelerate the economic growth of the country will be fulfilled.

7.12 SCOPE OF FURTHER STUDY

Any research study can explore only a limited field of knowledge. There are many aspects that need to be researched further. So, in the present case also there is a scope for further research in the same paper industry. The researcher suggests the following areas for further research.

- 1. This study was restricted only to a few companies of SMES. Hence, studies could be under taken on other SMEs and a comparative across companies can also be attempted.
- 2. For further studies, other profitability ratios can also be considered other than the variables considered in this study may also be taken to account for predictor variables.
- 3. Determinants of corporate capital structure, cost of capital, risk return analysis, shareholders value added, dividend practices followed, leverage analysis and identify sick and healthy units separately can be studied in detail.
- 4. Regional wise comparative study among sectors of SMEs in the study area can also be considered for further study.